

VOLUME 17



Law Office of Kevin P. McCann
137 S. Courtenay Pkwy, Ste 830
Merritt Island, Florida 32952

Telephone: (321) 222-3270

Fax: (321) 978-0302

July 31, 2020

Exhibit "B"

Kevin Maxwell, Esq.
The Law Office of Kevin C. Maxwell
733 West Colonial Drive
Orlando, Florida 32804

RE: Legal Opinion of Firearm Trigger Mechanism
United States Patent 10,514,223

Dear Mr. Maxwell:

Per your request, this letter serves as my legal opinion regarding the legality of a Firearm Trigger Mechanism ("FTM"), United States Patent Number 10,514,223 ("Patent"). You requested my legal opinion based on my current firearms-related legal practice, as well as my former twenty-five (25) year career and experiences as a special agent with the Bureau of Alcohol, Tobacco, Firearms, and Explosives ("ATF") in which I routinely determined the legality of numerous firearms and firearm parts.

I reviewed the Patent and I observed a video simulation regarding the functionality of the FTM. On June 13, 2020, I observed the nomenclature and operation of a prototype of the FTM at an outdoor firing range. I reviewed the July 30, 2020 FTM expert technical report of Daniel O'Kelly, International Firearm Specialist Academy, and I reviewed applicable statutes, case law, and prior ATF opinions for similar devices.

The Patent for the FTM states, "*The present invention provides a semiautomatic trigger mechanism for increasing rate of fire that can be retrofitted into popular existing firearm platforms... In the disclosed embodiments, the normal resetting of the hammer, as the bolt or bolt carrier is cycled, causes the trigger to forcibly reset by contact between the hammer and a surface of the trigger member. Once reset, movement of the trigger is blocked by a locking bar and cannot be pulled until the bolt has been returned to battery, thus preventing "hammer follow" behind the bolt or bolt carrier.*"

The mechanics and operation of the FTM, as described in the Patent, was visually presented in a video simulation of the device, which I observed and opined supports the mechanics and operation of the FTM as described in the Patent.

Mr. O'Kelly, a firearms technology expert, conducted a technical examination of the FTM and prepared the above-mentioned expert technical report, which I reviewed and opined supports the mechanics and operation of the FTM as described in the Patent.

Kevin Maxwell, Esq.
Legal Opinion
Page 2 of 2

The National Firearms Act ("NFA"), at Title 26, USC, §5845(b), provides the definition of a machinegun as follows: *"The term 'machinegun' means any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person."*

The critical element in the definition of a machinegun is, "... by a single function of the trigger." Thus, if a firearm fires more than one shot by a single function of the trigger, then the firearm is classified by statute as a *"machinegun"*. In contrast, if a firearm fires only one shot by a single function of the trigger, then the firearm is not classified as a *"machinegun"*.

The Gun Control Act ("GCA"), at Title 18, USC, § 921(a)(28), provides the definition of a semiautomatic rifle as follows: *"The term 'semiautomatic rifle' means any repeating rifle which utilizes a portion of the energy of a firing cartridge to extract the fired cartridge case and chamber the next round, and which requires a separate pull of the trigger to fire each cartridge."*

Based on my review of the Patent and video simulation, my observance of the nomenclature and functionality of the FTM, my review of Mr. O'Kelly's expert opinion report, my review of applicable statutes and case law, my review of prior ATF opinion letters, and my knowledge and experience, I conclude that a rifle equipped with the FTM is not a *"machinegun"* as it does not fire more than one shot by a single function of the trigger. I further conclude that a rifle equipped with the FTM utilizes a portion of the energy of a firing cartridge to extract the fired cartridge case and chamber the next round, and fires only one shot with each separate pull of the trigger, and is thus a *"semiautomatic rifle"*.

As a device that delivers only semiautomatic firing when equipped and utilized within a rifle, I conclude and opine that the FTM is a legal device not subject to the provisions of the NFA. Please let me know if you have any questions or require any additional information.

Very truly yours,

Kevin McCann

Kevin McCann, Esq.

Kevin P. McCann, Esq.
137 S. Courtenay Pkwy, Suite 830
Merritt Island, Florida 32952
Kevin@McCannFLLaw.com
(321) 222-3270

Professional Experience:

Law Office of Kevin P. McCann, Merritt Island, FL, April 2016 - Present

Sole Practitioner: Provides legal advice and services in business matters, compliance matters, contracts and civil disputes, firearms matters, criminal defense, personal injury, and estate planning

United States Department of Justice

Bureau of Alcohol, Tobacco, Firearms, and Explosives, 1992 – 2017 (Retired Oct. 2017)

Resident Agent in Charge, Orlando, FL, August 2012 – October 2017

Led groups of federal agents regarding international firearms trafficking, ITAR, narcotics, arson, explosives, money laundering, exporting, and white-collar crime investigations

Criminal Investigator, Orlando, FL, June 2007 – August 2012

Conducted complex investigations involving a variety of federal firearms trafficking, ITAR, narcotics, money laundering, exporting, and violent crime offenses

Supervisory Special Agent, Chicago, IL, April 2004 – June 2007

Supervised all tactical and strategic Intelligence, as well as all firearms trafficking investigations and operations in the Chicago metropolitan area

Criminal Investigator, Baltimore, MD, July 1992 – April 2004

Conducted complex violent crime, firearms, money laundering, narcotics, and white-collar crime investigations. Served as: Public Information Officer, Intelligence Officer, Certified Firearms Instructor, Special Response Team (SWAT) member, and Operations Officer

Education:

U.S. Army War College, Center for Strategic Leadership, Carlisle, PA

Strategic Leadership Course, 2017

University of Maryland, School of Law, Baltimore, MD

Juris Doctorate (JD), Focus on Criminal and Constitutional Law, May 2003

Federal Law Enforcement Training Center, Glynco, GA

Basic Law Enforcement Training and New Agent Advanced Training, 1993; Advanced Undercover Training, 1996; Special Response Team (SWAT) Training, 1998

Kevin P. McCann Resume
Page 2 of 2

Fairfield University, Fairfield, CT

Bachelors Degree, Economics and Finance, May 1992

Bar Admissions:

State Bar of Florida

U.S. District Court (Federal Bar); Middle District of Florida

Professional Associations:

Federal Law Enforcement Officers Association (FLEOA)

Member of the American Bar Association

Member of the Brevard County Bar Association

Member of the Orange County Bar Association

Member of Vassar B. Carlton Inn of Court

Volunteer Associations:

Member of the Elder Board for Georgianna Church

Member of the Brevard County Opioid Task Force



International Firearm Specialist Academy
PO Box 338 Lake Dallas, TX 75605
Email: Info@GunLearn.com

August 6, 2020

Kevin Maxwell, esq.
Rarebreed Triggers
Geneva, Florida

Exhibit "C"

Dear Mr. Maxwell,

This letter serves to explain the results of our recent examination and testing of your "Rare Breed, LLC FRT trigger system", which you recently submitted to us.

Before I explain my findings, it is necessary for me to clarify a few issues as they relate to firearm technology. First, allow me to differentiate between the term semi-automatic and fully-automatic (machinegun). As you know, Title 26 of the U.S Code defines a machinegun (fully-automatic) in subsection 5845(b) as:

The term "machinegun" means any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger.

It is important to note that by contrast, a semi-automatic is any firearm which shoots only one shot "automatically" by a single function of the trigger. The practical difference between fully-automatic and semi-automatic is referred to as the "cyclic rate of fire" (i.e. the number of shots which can be fired within a minute). This number is merely a ratio. Since few firearms have the capacity to hold a full minute's worth of ammunition, that number is determined by multiplying the number of shots which can be fired in a fraction of a minute. For example, if a firearm can fire 12 shots in 10 seconds, its cyclic rate of fire is 72 rpm (rounds per minute).

Also, many devices have been invented in recent years which increase a semi-automatic firearms cyclic rate of fire. Bump-stocks and other bump-fire devices are some of them. Despite the fact

p.2

Kevin Maxwell, esq.

August 6, 2020

that the U.S. Government recently reversed themselves by re-defining their years-long position on the word “automatically” as used in the definition of a machinegun, please note that bump-fire devices, including bump-fire stocks do nothing “automatically”, and firearms equipped with them require a separate trigger pull and release to fire each shot.

Please also note that all firearms have a “cycle of operation” which must be completed between the firing of one shot and the firing of a subsequent shot. There are eight steps which must occur during the cycle of operation (i.e. firing, unlocking, extraction, ejection, cocking, feeding, chambering, locking), and the order in which they occur depends upon the type of mechanical operation which the firearm employs (bolt-action, lever-action, break-action, pump-action, revolving action, self-loading, etc...).

Considering that an AR15-type firearm is a self-loading type of mechanical action (i.e. it uses the energy generated by a fired cartridge to reload its own chamber for a subsequent shot), the eight steps of the cycle of operation all occur extremely quickly (i.e. within less than 1/5 second). Therefore, a second shot may be fired by the shooter within 1/5 of a second after the first. Therefore, the cyclic rate of fire of a semiautomatic firearm is only limited by the physical dexterity of the operator of it. While many shooters may not have the physical dexterity to react each 1/5 second, the Rare Breed, LLC FRT trigger system allows a shooter to keep pressure on the trigger in anticipation of the end of a cycle of operation. Although the shooter may in fact hold pressure against the trigger during the cycle of operation, the trigger is not moving nor performing any “function” and is in fact locked in its non-firing position. Please note that “pressure” is not addressed in the definition of a machinegun, nor is the word “pull”. The word “function” is the key word in the definition, and “function” is defined at Dictionary.com as;

“to perform a specified action or activity; work; operate: to have or exercise a function; serve:”
<https://www.dictionary.com/browse/function>

It is imperative that it be recognized that in the Rare Breed, LLC FRT trigger system, keeping pressure on the trigger serves no function. It is akin to leaning on a locked door, and then falling through it once unlocked, rather than waiting for the unlocking and then pushing it open.

In the case of a machinegun, it isn't the fact that the shooter holds continuous pressure against the trigger, it's the fact that he “functions” the trigger by pulling it to the rear only once and holding it there, and multiple shots result from this “single function of the trigger”.

p.3

Kevin Maxwell, esq.

August 6, 2020

The advantage of the Rare Breed, LLC FRT trigger system is that when a shooter holds pressure against the locked trigger during the cycle of operation, he is able to pull (function) it again immediately after the cycle of operation ends, and avoid the normally much slower reaction time needed when using a traditional trigger. A traditional trigger relies on the shooter to hear the report and feel recoil while reacting to them, and then make the decision to release and re-pull the trigger, and then do so, all of which serve to slow reaction time and as a result, reduce the cyclic rate of fire.

The fact is, that a semiautomatic firearm, such as the AR15-type firearm, takes only a fraction of a second to cycle from one shot to another. There are videos on the internet of professional shooters firing 5 shots from an AR15 within one second. Regardless of whether the ability to fire that quickly semi-automatically is perceived as acceptable by ATF, the mechanical operation of a firearm equipped with an “Rare Breed, LLC FRT” trigger system is still done semi-automatically as defined in federal law. While it is true that a shooter may fire successive shots quickly by keeping pressure on the trigger of a firearm equipped with an “Rare Breed, LLC FRT” trigger system, the shooter must nevertheless make a subsequent movement of the trigger to the rear for each shot fired. The only thing which keeping continuous pressure on the trigger does, is to allow the shooter to be ready to make his next trigger movement immediately after the cycle of operation is complete.

We note that the only thing which happens “automatically” in the Rare Breed, LLC FRT trigger system is the return of the trigger to the set position when it is impinged upon by the hammer. It is also noteworthy that previous ATF rulings since 2009 concerning other devices for use in firing an AR15-type firearm more rapidly, such as the “fire-on-release” (i.e. Franklin Armory’s “binary” trigger) type of mechanisms, have defined a single function of the trigger as a “single movement of the trigger”. In fact the Franklin Armory Binary trigger system allows 2 shots to be fired with each pull-release of the trigger, yet ATF has opined that these are acceptable and not within the definition of a machinegun. The Rare Breed, LLC FRT trigger system in fact, requires two separate movements of the trigger (rearward and forward) for each single shot fired.

The Rare Breed, LLC FRT trigger system is a self-contained body which fits into the firing-control cavity of an AR15-type firearm. The body utilizes the conventional trigger pivot pin and hammer pivot pin to be held into place. The body houses a trigger, trigger-return spring, hammer, hammer-return spring, and a proprietary “locking bar”.

p.4

Kevin Maxwell, esq.

August 6, 2020

The “Rare Breed, LLC FRT” trigger system was examined as installed into a Spikes Tactical model SR15 rifle, serial #SKU0092, chambered in 5.56 x 45mm caliber. My examination revealed that the Rare Breed, LLC FRT trigger is designed such that upon firing a shot, as the bolt-carrier moves to the rear it cocks the hammer as normal. However, the hammer in turn forces the reset of the trigger to its original position. Upon doing so, a locking-bar locks the trigger into the reset position, making it physically impossible to move the trigger rearward during the remainder of the cycle of operation. I note that whereas a traditional semiautomatic AR15-type trigger must consciously be released by the shooter in order for it to reset, the “Rare Breed, LLC FRT” type of trigger system forces the reset of the trigger and makes it impossible for the shooter to hold the trigger to the rear. This actually prevents the fully-automatic firing which could result in the case of parts malfunction, and therefore makes an AR15 equipped with a Rare Breed, LLC FRT” trigger system less susceptible to fully-automatic firing than a conventional AR15.

This is accomplished as follows. The bolt-carrier group already having completed the extraction and ejection of a fired cartridge case, begins moving forward under the energy of the buffer-spring. As the bolt goes back into battery, having fed and chambered the next cartridge into the chamber, the lower-tail of the bolt carrier impacts the top of the locking block, causing it to pivot out of engagement with the trigger. Only then, once the next cartridge has been chambered and the breech is locked, is the shooter able to again pull the trigger to fire a follow-up shot. Upon pulling the trigger to fire another shot, the above -described procedural cycle begins again.

The testing of the submitted rifle was done on June 13, 2020, at an outdoor range in Geneva, Florida, in the form of a live-fire session, using factory-loaded ammunition.

While in the “Safe” position, the rifle was found to be incapable of firing as the result of a trigger-pull. While in the “Fire” or “semiautomatic” position, the rifle was found to operate as a semi-automatic firearm as originally designed, firing only one shot for every pull of the trigger. During the rapid firing of full 30 rd. magazines, which were fired as rapidly as possible, there were no instances of “hammer-follow”.

At no time did the firearm fire more than one shot per function of the trigger, no matter how quickly in succession the trigger was pulled and released.

In summary, the “Rare Breed, LLC FRT” trigger system did not perform in any way which would make it or a firearm in which it is properly installed, subject to the National Firearms Act. It is also my professional opinion that the “Rare Breed, LLC FRT” trigger system for AR-type

p.5

Kevin Maxwell, esq.

August 6, 2020

firearms as submitted, is not a firearm under the purview of the Gun Control Act, nor under the National Firearms Act.

I trust that my findings have been helpful.

Respectfully,

Daniel O'Kelly

Director

Daniel G. O'Kelly

RESUME OF
DANIEL G. O'KELLY
DIRECTOR
INTERNATIONAL FIREARM SPECIALIST ACADEMY, INC.
GUNLEARN.com

FIREARM EXPERT/CONSULTANT

PO Box 338
Lake Dallas, Texas 75065
E-mail: Info@GunLearn.com
Website: www.GunLearn.com

(813) 422-4674 phone

EDUCATION:

College: -Valparaiso University, Valparaiso, Indiana
Attended from fall 1974 through Spring of 1975.
-Indiana University
Transferred to Indiana University in fall 1975 and
graduated January, 1981 (Bachelor's degree).

EXPERIENCE:

I have over 40 years of full-time experience as a Police Officer, ATF Agent/Firearm Specialist, Criminal Investigator, Range Instructor, teacher of firearm technology, ammunition and firearm manufacturer, and collector. I have examined well over 100,000 firearms and even more pieces of ammunition. I've been involved in numerous investigations concerning them, and I have testified continually in criminal & civil cases in State, Superior, Circuit, District and Federal Courts since 1978. I have been recognized as an expert witness in Federal and State courts since 1990 and have given numerous depositions in criminal and civil cases. I have testified and/or consulted as an expert on the topics of use of force, self-defense with a firearm, ballistics, gunshot residue, federal and state firearm regulations, ATF rulings, ATF compliance and procedures, shooting reconstruction, firearm classification, firearm design, and wrongful death. I am one of only two ATF Agents who have performed an undercover investigation of illicit international firearm trafficking in Europe. Since 1996 I have been a full-time instructor of most facets of the field of firearms, including ballistics, forensics, ATF compliance and regulations, markings, manufacture, classification, and specialize in establishing the interstate nexus of firearms and ammunition in federal court. I have taught these topics countless times from coast to coast, and several times each, in Europe and Africa, and am a Technical Advisor to the Association of Firearm and Tool Mark Examiners, as well as an Advisory Board Member of the Sonoran Desert Institute. I co-wrote the lesson plans for the ATF National Academy, and the firearm technology and compliance training program for Cabela's, Inc., which is the largest firearm retailer in the world. I also served for two years as one of Cabela's corporate ATF

Resume of Daniel G. O'Kelly

December 16, 2019 Page 2

Compliance Managers. My training is also approved as continuing education by the American Board of Medico-legal Death Investigators, and the International Association for Identification, and I am a contracted instructor for the FBI. I also am a firearm designer and hold a patent as registered with the U.S Patent Office.

WORK EXPERIENCE:

11/11 to Present: **DIRECTOR & CONSULTANT**
International Firearm Specialist Academy
Denton, Texas

Self-employed consultant with a staff of fellow consultants, specializing in firearms and forensics-related services for law enforcement, the legal profession, the firearm industry, and the insurance industry.

Clients include civil Attorneys, prosecuting and defense Attorneys, law enforcement agencies and individual law enforcement personnel, licensed firearm dealers, manufacturers, importers and collectors.

Services offered include firearm and ammunition identification, certification as an accredited Firearm Specialist, training seminars on firearm technology, subject-matter expert court testimony, shooting scene reconstruction, shooting accident investigations & reconstructions, gun safety & design-related consultations, ATF compliance consultation and examinations/audits, armorer schools, range instruction, tool mark examinations, crime scene examinations & reconstruction, general criminalistics related examinations, gunshot residues issues, distance determination examinations, forensic pathology casework consultations, etc.

11/11 to 12/13: **CORPORATE SENIOR MANAGER**
FIREARM COMPLIANCE TEAM
Cabela's, Inc.
Sidney, Nebraska

Responsible for the auditing and inspection of the firearm departments of the company's 50 stores. This was in order to ensure and maintain ATF compliance, for one of the world's largest firearm retailers. I also co-wrote and delivered their training program to hundreds of employees on firearm ID, ATF compliance, Ammunition, the Gun Control Act and the National Firearms Act.

03-01 to 11/11: **ATF SENIOR SPECIAL AGENT**
Tampa, Florida

Duties included investigations of violations of the federal gun laws and explosives laws,

Resume of Daniel G. O'Kelly

December 16, 2019 Page 3

bombings, arsons and undercover investigations of organized crime. Further, it included firearm interstate nexus determinations and the teaching of same, firearm technology determinations, court testimony, and the training of ATF Agents and Investigators and other law enforcement personnel on all aspects of firearms. I was the commonly preferred Agent of the U.S Attorney's Office, for testimony on firearm matters.

05/02 to 05/03: **FIREARM INSTRUCTOR COORDINATOR (as ATF Agent)**
Tampa Field Division, Florida

During my tenure as an ATF Agent in Tampa, I served for 2 years in this capacity also. Duties included the firearm training of ATF personnel for the northern 2/3 of the State of Florida. This supervisory responsibility included:

- Firearm identification
- Ammunition casing, bullet and cartridge identification
- Firearm Interstate Nexus determinations for U.S. District Court
- NFA firearm examinations/determinations
- Oversight of 15 Range Instructors
- Maintenance of the firearm training budget, maintenance of over 200 firearms in inventory and maintenance of over 50,000 rounds of ammunition
- Assisting U.S. Attorneys and other Agents in firearm and ballistics related determinations
- Teaching seminars statewide, to thousands of police, legal, medical, and other personnel, on firearm and ammunition- related topics.
- Made determinations as to whether an item is a non-gun vs. a firearm, according to Title 18 and Title 26, U.S. Code
- Performed function checks on firearms as to their ability to fire
- Acted as the Armorer/repairman for all duty-issued firearms
- Purchased supplies- ammunition, equipment, etc... as needed for the Field Division.
- Testifying in court (local, state, and Federal) concerning my examinations. (several hundred times at last count).

01-96 to 03/01 **ATF SENIOR SPECIAL AGENT/ PROGRAM MANAGER**
ATF National Academy
Glynco, Georgia

I was the Chief Firearm Technology Instructor at the ATF National Academy, where I wrote and co-wrote the entire firearm technology course of study that is still taught to new Agents and compliance Investigators. I also instructed courses for U.S. Customs on firearm importation. I also was custodian of the firearm reference vault which contained over 800 firearms, including numerous NFA firearms. It was my duty to maintain, repair and have a teaching-level familiarity with the operation of all of them.

Resume of Daniel G. O'Kelly

December 16, 2019 Page 4

I also became certified by ATF as an Interviewing (Train-The Trainer) Instructor, and administered several Interviewing Schools around the U.S., as sponsored by the ATF National Academy. I also served as the Program Manager of ATF's Undercover School during 1998-99. I delivered and co-instructed numerous 2-week undercover courses to State, Local and Federal law enforcement officers, including ATF.

03-00 to 5-00 Temporary Duty as Supervisory ATF Resident Agent-in-Charge
Wilmington, Delaware

Tasked with correcting the multitude of problems in a rogue office which was being considered for closure due to the many failures of its Agents. Success was achieved in only six weeks as the Agent in Charge of the State of Delaware, resulting in my being awarded for Special Service by the Baltimore Field Division.

09-88 to 01-96 ATF SPECIAL AGENT
Merrillville, Indiana

Duties included investigations of violations of the federal gun law, explosives laws, bombings, arsons and organized crime. Heavy emphasis was given to undercover investigations of armed narcotics dealers and organized crime. Further, duties included firearm interstate nexus determinations, firearm technology determinations, court testimony, and the training of ATF Agents, Investigators and other law enforcement personnel on all aspects of firearms. I was the commonly preferred Agent of the U.S Attorney's Office for testimony on technical firearm matters.

03-77 to 09-88 POLICE OFFICER
Porter County, Indiana

Duties included public safety and service, investigations and arrests for violations of municipal ordinances, State and Federal law. Also included was routine traffic patrol, and answering calls and taking reports of crimes. I served also as department firearm range instructor, providing range oversight, and classroom instruction. I also served for two years in a full-time undercover capacity attached to the Porter County Drug Unit. My duties there were to make purchases of narcotics, firearms and other contraband and investigate the perpetrators. I served the last two years as a Detective Corporal, doing follow-up investigation of everything from misdemeanors to violent felonies.

Specialized Training:

- Recognizing an 80% Receiver in Casework (AFTE 2018 - Kingery) – 6/18
- Tour of LRB firearm manufacturing facility Floral Park, NY - 1/18

Resume of Daniel G. O'Kelly

December 16, 2019 Page 5

- Tour of the Museo Del Ejercito (Army Museum) in Toledo, Spain – 9/17
- Tour of the Imperial War Museum London, England – 9/17
- Tour of War and Peace Museum Oban, Scotland – 9/17
- Staged Homicide Crime Scenes seminar (Forensic Pieces) - 5/17
- Shooting Incident Reconstruction Course (40 hours, by Tritech Forensics) - 5/17
- Tour of Military Museum Menege (Finnish Government Military) museum in Suomenlinna, Finland - 9/16
- Tour of Armemuseum (Swedish Government Military) museum in Stockholm, Sweden – 9/16
- Barrel Making Techniques (AFTE 2016 – Offringa) -6/16
- The Silencer in Court for the Expert Witness (ATF FTB – Kingery) - 4/15
- The Machineguns and Machinegun Conversions (ATF FTB – Kingery) - 4/15
- Tour and research at HS Precision Rifles mfg. facility in Rapid City, SD, and Dakota Arms mfg. facility in Sturgis, SD – 2013
- Tour and research at Connecticut Shotgun in New Britain, CT., and Charter Arms in Sheldon, CT. – 2013
- Tour and research at STI Firearms mfg. facility in Austin, TX.- 2013
- Tour and research at North American Arms in UT. - 2013
- International Exchange of Military Technology, Titusville, FL - 2012
- Tour and research at Patriot Ordnance Factory, Phoenix, AZ. – 2012
- Tour and research at Arms Tech Ltd. in Phoenix, AZ. - 2012
- Tour and research at Windham Weaponry in Windham, ME.- 2012
- Armorer training, Kimber Firearms, West Palm Beach, FL. – 2011
- Tour and research at the Bundesamt fur Wehrtechnik und Beschaffung (BWB) (Federal Office of Defense Technology and Procurement) in Koblenz, Germany. – 2010
- Armorer training, DS Arms (FAL), Springfield Armory (XD), and Smith & Wesson (M&P), San Antonio, TX. - 2010
- Tour and research at Kel-Tec CNC Industries, Cocoa Beach, FL. – 2009
- Tour and research at Diamondback Arms, Titusville, FL. - 2009
- Tour and research at the German Police (BKA) firearm technology reference collection, Wiesbaden, Germany - 2005
- Tour and research at Vektor Firearms factory, and the New Generation Ammunition Factory, Pretoria, South Africa. – 2004
- Remington Armorer School (870, 1187 and 700), Cape Girardeau, Missouri. – 2003
- Tour and research at MFS ammunition factory, Sirok, Hungary. – 2003
- International Association of Law Enforcement Firearm Instructors (IALEFI) annual training conference, Orlando, Florida. – 2003
- Tour and research at Sellier & Bellot ammunition factory, Vlasim, Czech Republic. – 2003
- Tour and research at the U.S. Military Academy firearm museum at West Point, NY. – 2003
- Firearm Instructor Recertification/Enhancement Workshop, ATF Special Operations Division, Orlando, Florida. – 2002
- Colt Armorer school (AR-15/M-16/M-4 series), (Model O pistols), Fairfax, Virginia. – 2002

Resume of Daniel G. O'Kelly

December 16, 2019 Page 6

- Beretta Armorer school (model 92/96), San Diego, California. – 2002
- Fabrique Nationale Herstal (FNH) Armorer school (P90) San Diego, California. – 2002
- Tour and research at Pretoria Metal Pressings (PMP) ammunition factory, Pretoria, South Africa. - 2002
- Tour and research at Vektor firearm mfg., Pretoria, South Africa.- 2002
- IALEFI Training Conference, San Diego – 2002
- Tour and research at Fegarmy firearm factory (2nd tour), Budapest, Hungary. -2001
- Tour and research at the Hungarian Police Laboratory firearm reference collection, Budapest, Hungary -2001
- Tour and research at Ceska Zbrojovka (CZ) firearm factory (my 2nd tour) and the Czech government Proof House, Uhersky-Brod, Czech Republic. – 2001
- Tour and research at Glock firearm factory (my 2nd tour), Deutsch-Wagram, Austria. -2001
- Tour and research at the Vienna proof house in Deutsch- Wagram, Austria. – 2001
- Tour and research at Carl Walther firearm factory (my 2nd tour), Ulm, Germany. - 2001
- Tour and research at the government proof house, Ulm, Germany – 2001
- Tour and research at Heckler & Koch firearms (my 2nd tour), Oberndorf, Germany. -2001
- Tour and research at Sig-Sauer firearms (my 2nd tour), Eckernforde, Germany. – 2001
- Tour and research at the Kiel proof house, Eckernforde, Germany – 2001
- Tour and research at the Fabrique Nationale (FN) firearm Factory, Liege, Belgium. -2001
- Tour and research at the government proof house, Liege, Belgium -2001
- Tour and research at the Austrian Police Headquarters Waffen Referat (Weapons Reference Collection), Vienna, Austria. – 2001
- Tour and research at the Heeresgeschichtlen (Military History) Museum, Vienna, Austria. – 2001
- ATF Youth Crime-Gun Interdiction Initiative Instructor school, Washington, D.C. – 2000
- Tour and research (my 2nd tour) at the Heeresgeschichtlichen (Military History) Museum, Vienna, Austria. – 1999
- ATF Advanced Firearm Interstate Nexus course on ammunition manufacturing. Included tours and research at Hornady in Grand Island, Nebraska, 3D in Doniphan, Nebraska, Lake City Army Ammunition Depot in Independence, Missouri, Starline Brass and Sierra Bullets in Sedalia, Missouri, and the Winchester-Olin ammunition plant in East Alton, Illinois - 1999
- ATF Advanced Firearm Interstate Nexus course on firearm manufacturing. Included tours and research at Sturm-Ruger (my 2nd tour) and Pine Tree Castings in New Hampshire, Smith & Wesson and Springfield Armory in Massachusetts, and Colt and Mossberg in Connecticut. – 1998
- Sturm-Ruger Armorer course (Mini-14, Police Carbine, P89, P95) Newport, NH – 1997
- Tour and research at Sturm-Ruger firearm factory, Newport, New Hampshire. - 1997
- Tour and research at Pine Tree (firearm) Castings facility, Newport, New Hampshire. – 1997
- Tour and research at Ceska Zbrojovka (CZ) firearm factory in Uhersky-Brod, Czech Republic. - 1997
- Tour and research at Steyr firearm mfg. plant, Steyr, Austria.- 1997
- Tour and research at the Fegarmy' firearm mfg. plant, Budapest, Hungary. – 1997
- Tour and research at Glock pistol mfg. plant, Deutsch- Wagram, Austria. 1997

Resume of Daniel G. O'Kelly

December 16, 2019 Page 7

- Heckler & Koch Armorer, Sterling, Virginia. – 1996
- Sig-Sauer Armorer course (P225, P226, P228) Fort McClellan, Alabama. – 1996
- Reid Interviewing Seminar – 1996
- ATF Interviewing Instructor and Neuro-Linguistic Programming School – 1996
- SIMUNITIONS Scenario-Based (Train the Trainer) Seminar – 1996
- Tour and research at Sig-Sauer mfg plant, Eckernforde, Germany, - 1995
- Tour and research at Carl Walther firearm mfg. plant, Ulm, Germany, where I consulted on development of the model P99 pistol. – 1995
- ATF Advanced Arson and Explosives Investigation School – 1995
- Violent Crime/Homicide Investigation School (USDOJ) – 1994
- Tour and research at the Ministry of Defense, Pattern Room, Nottingham, England. – 1994
- Tour and research at Holland & Holland, Ltd., firearms London, England. – 1994
- Bureau of ATF Academy Instructor Certification – 1994
- Glock Armorer Course, Springfield, Illinois. – 1993
- Advanced Interviewing and Interrogation (Portage PD)- 1992
- Sig-Sauer Armorer Course, Greenwood, Indiana. - 1990
- FLETC Distinguished Weapons Expert Certification – 1990
- ATF Basic Firearm Interstate Nexus course, Washington D.C., (included examination of over 4,500 firearms) - 1990
- Firearm Instructor certification course at the Federal Law Enforcement Training Center, Marana, AZ. – 1990
- New Agent Training at the Federal Law Enforcement Training Center, Glynco, Georgia. – 1988
- Criminal Investigator School, at the Federal Law Enforcement Training Center, Glynco, Georgia. – 1988
- Smith & Wesson Revolver Armorer Course, Kent State University -1987
- Smith & Wesson's Scope -Sighted Rifle School - 1987
- Indiana L.E. Training Board, Instructor Certification – 1987
- Aerko International Chemical Weapons Specialist School, Camp Atterbury, Indiana. – 1987
- NRA Police Firearms Instructor Certification - 1985
- FBI Hostage Negotiator School – 1984
- Firearm Instructor Training Course at the Indiana Law Enforcement Academy, Plainfield, IN. – 1982
- Monadnock PR-24 Police Baton (Portage PD) – 1981
- Police Officer Street Survival (L/SPSTC) – 1981
- Chemical Tests for Intoxication Certification (ILEA) - 1979
- Police Officer Certification, Indiana Law Enforcement Academy, Plainfield, Indiana. – 1979
- NRA Police Expert (Range Qualification) - 1978

PROFESSIONAL AFFILIATIONS

NSSF (The National Shooting Sports Foundation)
ARIN (ATF's Ammunition Research and Identification Network)

Resume of Daniel G. O'Kelly

December 16, 2019 Page 8

IAA (The International Ammunition Association)
NDIA (The National Defense Industrial Association)
IALEFI (The International Association of Law Enforcement Firearm Instructors)
NRA (The National Rifle Association)
ABMDI (Association of Medico-legal Death Investigators)
REAF (Property an Evidence Association of Florida)
FDIAI (Florida Division- International Association of Identification)
IAI (International Association for Identification – National Chapter)
ILEETA (International Law Enforcement Educators and Trainers Association)
AFTE (Association of Firearm and Tool Mark Examiners)

PRESENTATIONS

1. Certified Firearm Specialist Course (3-day seminar) – Kansas City, MO 8/19
2. Certified Firearm Specialist Course (3-day seminar) – Las Vegas, NV 8/19
3. Certified Firearm Specialist Course (3-day seminar) – St. Louis, MO 8/19
4. Certified Firearm Specialist Course (3-day seminar) – Charlotte, NC 7/19
5. Certified Firearm Specialist Course (3-day seminar) – Oceanside, CA 7/19
6. Certified Firearm Specialist Course (3-day seminar) – San Antonio, TX 7/19
7. Certified Firearm Specialist Course (3-day seminar) – New Haven, CT 6/19
8. How to Identify “Other” Firearms – AFTE 50th Annual Conf. Nashville, TN 5/19
9. Machineguns and Clandestine Conversions – Nashville Police Department/AFTE 5/19
10. Certified Firearm Specialist Course Seattle, WA – 5/19
11. Certified Firearm Specialist Course Orlando, FL – 5/19
12. Certified Firearm Specialist Course Skokie, IL – 4/19
13. Advanced NFA Firearm Training – Houston, TX 6/18
14. “Other Firearms” (AFTE 2018) - Charleston, WV 6/18
15. Firearm Technology and Specialist Training (3-day seminar) – Boston, MA 5/18
16. Firearm Technology and Specialist Training (3-day seminar) – Brighton, CO 4/18
17. Firearm Technology and Specialist Training (3-day seminar) – Santa Cruz, CA 3/18
18. Firearm Technology and Specialist Training (3-day seminar) – Floral Park, NY 1/18
19. Firearm Technology and Specialist Training (3-day seminar) – Oceanside, CA 11/17
20. Firearm Technology and Specialist Training (3-day seminar) – Pensacola, FL 11/17
21. Firearm Technology and Specialist Training (3-day seminar) – St. Louis, MO 8/17
22. Firearm Technology and Specialist Training (3-day seminar) – Kissimmee, FL 6/17
23. Firearm Technology and Specialist Training (3-day seminar) – Seattle, WA – 4/17
24. Firearm Technology and Specialist Training (3-day seminar) – Chicago, IL – 4/17
25. Firearm Technology and Specialist Training (3-day seminar) – Escondido, CA – 10/16
26. Firearm Technology and Specialist Training (3-day seminar) – Ft. Myers, FL – 10/16
27. Home-made Firearms, Silencers, Disguised Firearms, and Court Testimony – SWAFS - Galveston, TX - 9/16
28. Firearm Classification and Markings – IAI/Cincinnati, OH – 8/16
29. Certified Firearm Specialist Course (3-day seminar) – FDLE Jacksonville, FL - 7/16

Resume of Daniel G. O'Kelly

December 16, 2019 Page 9

30. Firearm Technology and Specialist Training (3-day seminar) – New Jersey St. Police – 7/16
31. Firearm Technology and Specialist Training (3-day seminar) – Pensacola, FL PD - 7/16
32. Firearm Technology and Specialist Training (3-day seminar) – CSI Academy Alachua, FL – 7/16
33. Firearm Classification and Markings – AFTE/New Orleans, LA – 6/16
34. Discerning real guns from fakes with video/photo evidence – AFTE/New Orleans, LA – 5/16
35. Firearm Technology and Specialist Training (3-day seminar) – Santa Fe, NM – 5/16
36. Firearm Technology and Specialist Training (3-day seminar) – St. Louis, MO – 4/16
37. Firearm Technology and Specialist Training (3-day seminar)– Seattle, WA – 4/16
38. Firearm Technology and Specialist Training (3-day seminar) – Miami, FL – 1/16
39. Firearm Technology and Specialist Training (3-day seminar) – Biddeford, Maine – 1/16
40. Firearm Technology and Specialist Training (2-day seminar) – Jacksonville, FL – 9/15
41. Firearm Technology and Specialist Training (2-day seminar) – Windham, Maine – 8/15
42. ATF Firearm Licensee Compliance; Jeffersonville, IN – 8/15
43. Firearm Technology and Specialist Training (2-day seminar) –Pensacola, FL PD – 7/15
44. Firearm Technology and Specialist Training (2-day seminar) - Kissimmee, FL – 7/15
45. Firearm Technology and Specialist Training (2-day seminar) – Seattle, WA - 5/15
46. Firearm and Ammunition Classification – PNWIAI Conference – Portland, OR 5/15
47. Firearm Technology and Specialist Training (2-day seminar) – Miami, FL – 3/15
48. Firearm Technology and Testimony (2-day seminar) – Orange Beach, AL - 11/14
49. Firearm Technology and Testimony (2-day seminar) – Albuquerque, NM – 10/14
50. Basic Firearm Technology and Testimony – Ft. Myers, FL – 7/14
51. Advanced Firearm Technology – Institute of Military Technology – Titusville, FL. 10/12
52. Firearm Recognition/Handling/Testimony – Orange Co. Sher. Ofc. – Orlando, 7/5/12
53. Firearm Recognition/Handling/Testimony – Florida Dept. of Law Enf. - Orlando, 6/4/12
54. Firearm ID – How to Read a Gun – Florida Assn. of Lic. Inv. – Tampa, FL 6/11/11
55. Firearm Hist. and Development – A Primer/ Becoming an Expert – W. P. Bch, FL, 5/26/11
56. Contributor to the book Cartridges & Firearms Identification by Robert Walker, ISBN #9781466502062 – 2010
57. Firearm Technology and Enforcement – Int'l LE. Academy – Budapest, Hungary, 7/10
58. Crime-Gun Safety, Recognition and Handling – Daytona Beach Police Department, 09/09
59. Crime-Gun Safety, Rec. and Handling – Brevard County, FL Sheriff's Office, 06/09
60. Ammunition Technology – Property and Evidence Association of Florida, Orlando, 02/09
61. Firearm Interstate Nexus – ATF and South African Police Service - Orlando, FL, 01/09
62. Industry Operations Investigator Basic Course – Glynco, GA, 10/07
63. Firearm Technology and Enforcement – Gabarone, Botswana (Africa), 08/07
64. Small Arms Trafficking – ILEA – Gabarone, Botswana (Africa), 08/07
65. Firearm Recognition, Technology and Anti-Smuggling – ILEA Budapest, Hungary, 12/08
66. Firearm Recognition/Technology – Orange County Sheriff Orlando, FL 08/08
67. Crime-Gun Rec., Handling, Tech. and Prosecution – FDIAI – Panama City, FL, 11/05
68. Reloading Metallic Cartridges - Florida Dept. Of Law Enforcement – Tampa, FL 03/08

Resume of Daniel G. O'Kelly

December 16, 2019 Page 10

69. New Developments in Ammunition – FDLE Orlando, FL, 10/04
70. Firearm Technology and Enforcement – Gabarone, Botswana (Africa), 09/04
71. Small Arms Trafficking – ILEA – Gabarone, Botswana (Africa),
72. Man-Portable Air Defense Systems – Florida Intelligence Unit – Daytona Bch, FL 07/04
73. Reloading Metallic Cartridges - Florida Dept. Of Law Enforcement – Tampa, FL, 08/03
74. Firearm Recognition, Technology and Anti-Smuggling – ILEA Budapest, Hungary, 06/03
75. Firearm Technology and Enforcement – Gabarone, Botswana (Africa), 08/02
76. Firearm Recognition, Technology and Anti-Smuggling – ILEA Budapest, Hungary, 02/97
77. Firearm Technology for Law Enforcement Gary, IN, 12/95

AWARDS & ACHIEVEMENTS

Fraternal Order of Police (Past-President) Westchester Lodge #152 - 1980
Presented Distinguished Weapons Expert Award by FLETC - 1990
Presented Special Act or Service Award by ATF - 1993
Presented U.S. DOJ Award for Public Service by U.S Attorneys Office - 1995
Presented Special Act or Service Award by ATF - 1999
Presented Special Act or Service Award by ATF - 2000
Presented Certificate of Appreciation by ATF National Academy – 2001
Presented Special Act or Service Award by ATF - 2002
Presented Award for Educational Support by PEAFF - 2005
Invited to join ATF's ARIN (Ammunition Research & ID Network) – 2005
Featured Speaker- "Firearm Technology"- Property and Evidence Association of
Florida Annual Conference - 2006
Research of ammunition company history determination on interstate nexus,
on metallic cartridges found in the State of Florida.- 2009
Presented IALEFI Guest Instructor Award - 2010
Invited onto the Advisory Board of the Sonoran Desert Institute – 2014 - Present
Recognized as a Technical Advisor to the Assn. of Firearm and Tool Mark Examiners –
2017 - Present

February 24, 2021

VIA E-MAIL ONLY

kevinmaxwell@gmail.com

Kevin C. Maxwell, Esquire
Law Offices of Kevin C. Maxwell
733 West Colonial Drive
Orlando, Florida 32804

Subject: Rare Breed FRT-15

Dear Kevin:

My consulting firm, Rick Vasquez Firearms, LLC was asked to provide an opinion concerning the classification of Rare Breed Triggers model FRT-15 trigger. As part of my research and analysis, I have reviewed a Rare Breed Trigger installed in a firearm, along with the video on the operating principles. I additionally reviewed previous ATF Firearms Technology Branch rulings on machineguns and rate of fire increasing triggers and utilized my extensive experience in firearms technology classification related matters. This experience includes, among other things, over two decades in the United States Marine Corps, work as a firearms instructor, and fifteen years with the Bureau of Alcohol, Tobacco and Firearms, including time as the acting chief of ATF's Firearms Technology Branch – the branch of ATF charged with rendering firearms classification decisions.

As a consultant, I have worked with numerous federal firearm licensees with regard to ATF regulatory compliance and related matters, including a number of firearm manufacturers. Accordingly, and while my analysis and opinions are set forth in additional detail below, it is my opinion that the Rare Breed Triggers FRT-15 trigger is a legal semi-automatic trigger and does not constitute a machinegun pursuant to the National Firearms Act.

I. LEGAL DEFINITIONS AND BACKGROUND:

Under 18 U.S.C. § 921(a)(3), the Gun Control Act of 1968 ("GCA") defines the term "firearm" to include "any weapon (including a starter gun) which will or is designed to or may be readily converted to expel a projectile by the action of an explosive ... [and] ... the frame or receiver of any such weapon..." Moreover, under 26 U.S.C. § 5845(b), the National Firearms Act of 1934 ("NFA") defines "machinegun" to include "any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger." This term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person." (emphasis added). Thus, the question presently under consideration is whether the Rare Breed Triggers FRT-15 falls within the definition of "machinegun" under the NFA.

Exhibit "D"

RICK VASQUEZ FIREARMS, LLC
February 17, 2021
Page 2 of 3

II. APPLICATION AND ANALYSIS:

As a preliminary matter, it has long been ATF's position (dating back to the late 2000) that semi-automatic rifles that did not use electronics, springs or hydraulics to reset the trigger were not machineguns. The FRT-15 has a redesigned trigger, hammer, and a locking bar that functions as a disconnecter. This system forces the trigger to mechanically reset and allows the shooter to pull the trigger in a rapid movement.

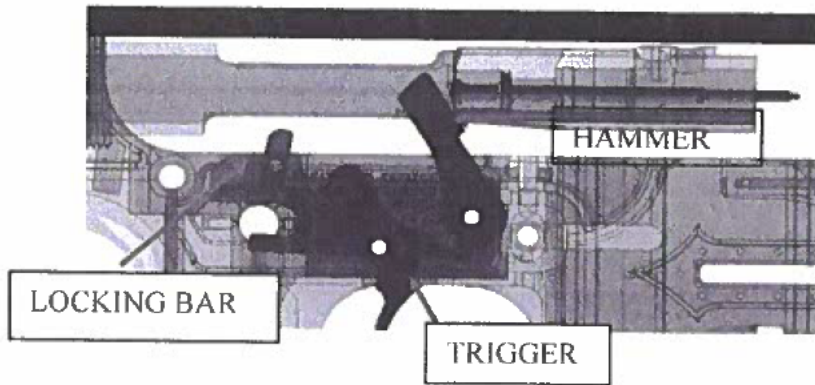
The FRT-15 is designed to fire in the following manner:

- With the firearm loaded and placed in the fire position.
- The shooter pulls the trigger, and it disengages from the hammer.
- The hammer engages, the hammer in turn striking the primer of the round in the chamber and the firearm fires.
- During the extraction and ejection phase of the cycle of operation, the hammer is cocked from inertia of the bolt carrier group (BCG) traveling back from gas pressure. Simultaneously as the hammer is cocked, the hammer forces a reset of the trigger..
- When the trigger is reset, the locking bar swings forward and engages the trigger, mechanically locking it in the cocked or ready to fire position. This action can be felt by the pushing of the trigger finger forward..
- As the BCG gets to its final forward position, the locking bar is disengaged by the bolt allowing the previously locked trigger to be pulled for the follow-up shot.

This cycle of operation is nothing other than the FRT pushing the trigger and trigger finger forward allowing the shooter to pull the trigger rapidly. The shooter can simply pull and release the trigger for a standard rate of fire. Accordingly, since ATF interprets the term "single function of the trigger" in the NFA definition of machinegun to mean a single movement of the trigger. Each "pull" of a trigger constitutes a single movement.

The FRT-15 trigger is specifically designed to fire a single shot on each movement of the trigger. My evaluation which included a thorough evaluation of the parts, operating principle, and a test fire, of the FRT-15 in an AR15 type rifle, verified that it fired only when the trigger is pulled. The reset function of the trigger pushes the trigger finger back to the fire position allowing the shooter to shoot rapid semi-automatic fire.

RICK VASQUEZ FIREARMS, LLC
February 17, 2021
Page 3 of 3



Rare Breed Triggers FRT - Action
- RARE BREED TRIGGERS

<https://www.rarebreedtriggers.com>

1/2

III. CONCLUSION:

The FRT trigger system is a self-contained trigger assembly with a redesigned hammer, trigger, and locking bar (disconnecter). The FRT trigger system does not have an automatic sear nor does it operate by electronics, springs, or hydraulics, therefore, is not a "machinegun". Additionally, there is no verifiable history of ATF opinions to support this trigger being classified as a machinegun, both in general and specifically pertaining to the underlying design.

Please contact me with any questions or concerns that you may have or should you require any clarification of me opinion. This letter and the opinions contained therein are intended solely for your law firm and your client and are not to be relied upon by any other individual or entity for any purposes.

Very truly yours,

Rick Vasquez

Rick Vasquez Firearms LLC
235 Deer Creek Road
Winchester VA 22602
540-535-6633

Social Security Number:
Country of Citizenship: U.S.
Security Clearance: Previous top secret

EMPLOYMENT

October 2014 - Present

Consultant to FFLGuard and the Firearms Industry

As a consultant to FFLGuard provide expertise on manufacturing of firearms, the NFA, Imports, AECA and firearms compliance

Active Crisis Consulting

- General manager for Active Crisis Consulting
- Provide Active Shooter prevention services
- Provide security protocols and procedures to private sector and corporate industry sector

Independent Firearms Consultant

- Consultant is contracted to numerous major firearms manufacturers
- Provide firearms classification expertise as a non-paid consultant to the Australian Crime Commission
- Served as a firearms expert to the United Nations on the Small Arms and Light Weapons panel in Brussels, Belgium. Prepared articles on "Home Made Firearms", "Parts Kits Firearms", and provided guidance on trafficking of firearms
- Prepared and presented firearms training based on the Gun Control Act (GCA) and the National Firearms Act (NFA) to the Federal Bar Association, Northern VA.
- Provide expert advice and testimony in civil litigation pertaining to firearms
- Provide services related to firearms identification and classification, as applied to the GCA and the NFA, to the firearms industry and the private sector
- Conducted a firearms identification course to El Salvadoran prosecutors in El Salvador
- Provide evaluations of firearms functionality for product liability cases
- Provide training on all aspects of the GCA, NFA, and compliance to the firearms industry
- Developed and led team building events centered around firearms and leadership
- Instruct all levels of firearms use and training
- Provided expert testimony in cases relating to firearms

- Have performed product evaluations on firearms for importation and compatibility to current firearms laws
- Professional firearms/shooting instructor
- Provide expertise in the design of firearms related items to include arm braces for submission to ATF
- Manage a 300 acre 360-degree capable range facility
- Develop Standard Operating Procedures (SOPs) for the safe operation of both indoor and outdoor range facilities
- Instruct basic and advanced shooting method
- Developed a Cartridge Headstamp Identification Guide for ATF

August 2011 - September 2014

BUREAU OF ALCOHOL, TOBACCO, FIREARMS and EXPLOSIVES (ATF)

Firearms Trafficking and Interdiction Branch, Firearms Operations Division

Program Manager/ Branch Chief, Firearms Training Branch

- Developed programs and training on firearms trafficking and interdiction
- Assisted Field Operations in identifying and instructing firearms trafficking trends
- Assisted in updating and writing all Standard Operating Procedures (SOPs) of the National Firearms Act Branch (NFA)
- Developed specific training on 3D printing, partially complete receivers, and counterfeit firearms
- Trained all Central American and Mexican federal law enforcement counterparts on U.S. firearms laws and regulations
- Served as the firearms expert for Field Operations on all firearms-related subjects
- Trained a cadre of the Mexican Naval Infantry in the use of foreign weapons and machineguns
- In conjunction with NATO forces I fired all Bosnian military firearms (in Bosnia) and recovered the cartridges for entry into NIBIN. This evidence was used in prosecution in the War Crimes Tribunals.
- Presented United States firearms regulations and trafficking trends to Interpol and the Royal Canadian Mounted Police
- Developed foreign weapons identification courses
- Developed and presented a course on importation guidelines and United States Firearms laws to the Australian Federal Police, Australian Crime Commission and Australian Customs
- Provided firearms identification and trafficking training to the Judges of Guatemalan Supreme Court, which led to collaboration between our countries to destroy a large cache of firearms that were being trafficked to the U.S.

June 1999 – August 2011

BUREAU OF ALCOHOL, TOBACCO, FIREARMS and EXPLOSIVES (ATF)

Firearms Technology Branch

Assistant Branch Chief, Acting Chief, Firearms Technology Branch (FTB)

- Prepared SOPs on for how to conduct live fire training on outdoor and indoor ranges
- Developed certification standards and safety protocols for indoor range training and conducting tests in the indoor test range for testing on all firearms such as; machineguns, handgun, silencers, etc., regulated by the GCA and NFA
- Supervised, organized workload, and trained a staff of 14 personnel, including eight firearms enforcement officers, one evidence technician, one writer-editor, one program analyst, and two gunsmiths
- Developed training in all aspects of firearms use and identification. Instrumental in developing and implementing training for law enforcement counterparts in several federal, state and local law enforcement agencies
- Served as the expert on all Gun Control Act (GCA) and National Firearms Act (NFA) identification and classifications
- Wrote Standard Operating Procedures (SOP) for all aspects of FTB operations. These SOPs have now been used to defend ATF policies in criminal and civil litigation
- Served as a Firearms (shooting) Instructor
- Instrumental in developing firearms identification training specifically for the "Southwest Border" program
- Reviewed and corrected all reports prepared on evidence submitted by ATF special agents
- Served as the expert on classification of items submitted by the firearms industry for classification under the GCA and the NFA
- Served as the expert on firearms importation guidelines and reviewed all items submitted for approval for importation
- Developed foreign weapons identification and use training and have provided this instruction to Secret Service, DEA, ATF, and other Law Enforcement agencies

June 1996 - June 1999

DIPLOMATIC SECURITY SERVICE (DSS)

Firearms Instructor -- November 1996 -- June 1999

- Managed an indoor range and several offsite range facilities
- Developed SOPs on how to conduct range operations, shooting techniques, safety protocols, role of the instructor, and how to determine surface danger zones
- Conducted all manner of firearms training for DSS. Developed training syllabi for long-range rifle training, fire and maneuver tactics, submachine gun, handgun, and evacuation techniques under live fire
- Certified the Mobile Security Division and the Tactical Response team as firearms instructors and how to develop expedient ranges
- Wrote training manuals and training syllabi to cover all aspects of firearms training
- Developed and conducted training in force protection, IED detection, surveillance, and counter terrorism
- Instructed the force continuum policy to DSS Special Agents

August 1974 - April 1996

UNITED STATES MARINE CORPS

Attained the rank of Master Sergeant and served in many key leadership roles.

August 1994 - April 1996

Detachment Commander – American Embassy, Moscow, Russia -

January 1993-August 1994

Detachment Commander – American Embassy, Kingston, Jamaica

January 1989- January 1993

Floor Chief – Weapons Training Battalion – Quantico, Virginia

- Chief instructor of the USMC precision weapons shop
- Instructed an armorer training course in Colombia, South America, in support of "Operation Snowcap"
- Certified as a High-Risk Personnel (firearm trainer) instructor
- Supervised range operations on pistol and rifle ranges out to 1000 yards

January 1974 - January 1989

- Assisted with the development and introduction of the M16A2 while at Weapons Training Battalion
- Recruiter –Winston Salem NC – and other various duty stations
- Received the award as Non-Commissioned Officer-in-Charge of the Year and was meritoriously promoted to Gunnery Sergeant

ADDITIONAL QUALIFICATIONS AND AWARDS

- Interstate and Foreign Nexus Instructor
- Testified over 50 times in federal and state court and certified as an expert witness on firearms statutes and regulations. To include for the Defense: Arm Brace case, U.S. v. Wright, Case No. 3:18CR162.
- Distinguished high power rifle shooter
- FFL holder, successful business in custom rifle repair and sales
- Certified armorer for the following gun companies, Ruger, Glock, Smith and Wesson, and Heckler and Koch
- Received manufacturing and historical instruction at the following firearms sites both in conus and overseas; Marlin, Savage, H&R Inc., Winchester, Mossberg, Springfield Armory, Wilson Tools, Sig, Glock, Walther, Mauser, Sig Sauer, etc.
- Completed course of instruction in Principles of Acoustics and the Measurement of Sound
- Developed a course in recognition of silencers/silencer components and served as an expert in the classification of silencers and silencer components under federal statutes
- Wrote numerous training lesson plans in the use and identification of firearms-related subjects

Richard Vasquez

- Trained official government personnel in firearms identification in the following countries: France, Canada, Colombia, El Salvador, Mexico, Canada, Belize, Jamaica, Curacao and Guatemala, etc.
- Conversant in all aspects of the NFA
- Knowledgeable in the requirements of importing firearms and firearms components
- Presented firearms regulations to the Guatemalan Supreme Court
- Received public service award from the United States Attorney in the 4th district
- Recipient of ATF's Distinguished Service Medal
- Recipient of numerous letters of appreciation from ATF, FBI, and foreign law enforcement
- Headquarters USMC representative to introduce the M16A2 into the hands of 6th Marine Regiment
- Trials testified in last 5 years
CASE NO. 3:18CR162 Kellend Wright Verse DOJ
231-73-8407/VA OL #T6J867624 Robert Hymes Verse Louden County VA



Firearms Training and Interstate Nexus Consulting, LLC
5557 28th Street SE Ste 205
Grand Rapids, MI 49512

May 4, 2021

Kevin C. Maxwell, Esquire
Law Offices of Kevin C. Maxwell
733 West Colonial Drive
Orlando, Florida 32804

Dear Mr. Maxwell,

My firearms consulting company, Firearms Training and Interstate Nexus Consulting, LLC was asked to provide an opinion on the classification of the Rare Breed Triggers FRT-15 and whether or not it is a machinegun as defined in Title 26 U.S.C. § 5845(b). I recently retired from the Bureau of Alcohol, Tobacco, Firearms, and Explosives after 22 years as a special agent, (29 years total law enforcement). My career at ATF included being an instructor at ATF's National Academy teaching the GCA and NFA firearms identification block of instruction to new employees attending either the Special Agent Basic Training or the Industry Operations Investigator Basic Training academy courses. I was also an ATF Firearms Instructor and attended numerous firearms armorer training classes. In my last position at ATF I was a Supervisory Special Agent and the Chief of the Advanced Firearms and Interstate Nexus Branch, a branch within the Firearms and Ammunition Technology Division (FATD).

The pertinent authority under consideration for this evaluation is the Gun Control Act of 1968 (GCA) and the National Firearms Act (NFA) of 1934 and the definitions contained in them.

The Gun Control Act in Title 18 U.S.C. § 921(a)(3)(A) defines the term "firearm" (in part) as "any weapon (including a starter gun) which will or is designed to or may readily be converted to expel a projectile by the action of an explosive". Additionally, the Gun Control Act in Title 18 U.S.C. § 921(a)(28) defines the term semiautomatic rifle as "any repeating rifle which utilizes a portion of the energy of a firing cartridge to extract the fired cartridge and chamber the next round, and which required a separate pull of the trigger to fire each cartridge."

Exhibit "E"

The National Firearms Act in Title 26 U.S.C. §5845(b) defines the term "machinegun" as "*any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.*"

On March 30, 2021, I examined and test fired two Spike's Tactical AR-15 style rifles which both had Rare Breed Triggers FRT-15 installed in them. The test firing was conducted using factory MAGTECH ammunition at a range in Florida. Both firearms functioned as designed and as semiautomatic rifles. I also examined the components of the FRT-15, which is a self-contained trigger unit consisting of three major parts identified as a locking bar, hammer, and trigger.

I have reviewed the Firearm Trigger Mechanism's Patent Number US10,514,223, previous ATF (FTB & FATD) classification letters, an animation showing the semiautomatic function of the FRT-15 trigger during the cycle of operation, other opinion letters, and federal court opinions.

I have also read the March 25, 2021 Sixth Circuit Court of Appeals ruling in *Gun Owners of Am., Inc., et al. v. Garland, et al.* No. 21a0070 (CA6 Mar. 25, 2021). Although that case involved "Bump Stocks", I think what the court ruled is applicable to the Rare Breed Triggers FRT-15, because it emphasized and applied the actual definition of a machinegun in Title 26 U.S.C. § 5845(b) and rejected ATF's newly made up machinegun definition. The Court ruled "And because we find a single function of the trigger applies to the mechanical process of the trigger, we further hold a bump stock cannot be classified as a machine gun because a bump stock does not enable a semiautomatic firearm to fire more than one shot each time the trigger is pulled".

Due to the design of the FRT-15, the locking bar does not allow it to function as a "hammer follow" machinegun. Rather, during the cycle of operation the bolt carrier cocks the hammer and resets the trigger. The locking bar pivots forward locking the trigger in place until the bolt carrier comes back forward to the locking position and the locking bar is unlocked. The FRT-15 trigger can now be pulled. The FRT-15 allows for very fast semiautomatic trigger pulls due to the quick resetting trigger.

The Rare Breed Triggers FRT-15 is designed and functions as a semiautomatic trigger. The FRT-15 does not enable a semiautomatic firearm to fire more than one shot each time the trigger is pulled. Therefore, it is my opinion, Rare Breed Triggers FRT-15 is not a firearm or a machinegun, and is a legal semiautomatic trigger.

Sincerely,



Brian Luettkke
Resident Agent/Owner FTINC, LLC



U.S. Department of Justice

Bureau of Alcohol, Tobacco,
Firearms and Explosives

Tampa Field Division

Tampa, Florida 33602-3945

www.atf.gov

767000:AF
3310

JUL 26 2021

Mr. Kevin Maxwell
Rare Breed Trigger, LLC
733 W. Colonial Drive
Orlando, FL 32804

Dear Mr. Maxwell:

This is in reference to the Rare Breed Triggers, model FRT-15, manufactured and marketed by your company. The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) examined this trigger and determined it to be a machinegun as defined in the National Firearms Act (NFA).

The NFA defines a firearm to include, in relevant part, "a machinegun." 26 United States Code (U.S.C.) § 5845(a)(6). A machinegun is defined under section 5845(b) as –

any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.

Italics Added.

As the Rare Breed Triggers FRT-15 is a machinegun under the NFA, it is subject to the registration, transfer, taxation, and possession restrictions applicable to these regulated weapons, which include criminal penalties relating to the illegal transfer and possession of said weapons. *See* 26 U.S.C., Chapter 53; *see also* 26 U.S.C. § 5871 (any person who violates or fails to comply with the provisions of the NFA shall be fined \$10,000 per violation and is subject to imprisonment for a term of up to ten years). Additionally, machineguns are also subject to the Gun Control Act of 1968, as amended (GCA), *see* 18 U.S.C. § 921(a)(23), and are subject to prohibitions regarding the possession, transfer, and transport of such items as set forth in 18 U.S.C. §§ 922(o) and 922(a)(4).

Exhibit "F"

ATF 1049

-2-

Mr. Kevin Maxwell
Rare Breed Trigger

The manufacture and sale of a machinegun is subject to significant legal restrictions and compliance under the GCA and the NFA. The NFA requires that the manufacturer register each firearm manufactured in the National Firearms Registration and Transfer Record. *See* 26 U.S.C. § 5841; 27 C.F.R. § 479.101. Any firearm manufactured and/or transferred in violation of the NFA, and/or subject to the NFA, and possessed by a person to whom it is not registered, is a violation of the NFA and subject to seizure and forfeiture. *See* 26 U.S.C. §§ 5861, 5872.

ATF has concluded the Rare Breed Triggers, model FRT-15, is a combination of parts designed and intended for use in converting a weapon into a machinegun, hence, the FRT-15 has been classified as a "machinegun" as defined by the NFA and GCA. ATF's examination found the Rare Breed Triggers, model FRT-15, allows a firearm to expel more than one shot, without manual reloading, with a single, continuous pull of the trigger. Because the FRT-15 is properly classified as a "machinegun" you must immediately take the following actions:

- 1. Cease and desist all manufacture and transfer of the Rare Breed Trigger FRT-15.**
- 2. Contact ATF within 5 days of receipt of this letter to develop a plan for addressing those machineguns already distributed.**

The NFA levies a \$200 tax on each firearm made and an additional \$200 tax on each firearm transferred. *See* 26 U.S.C. §§ 5811, 5821. Rare Breed Triggers may be liable for a \$200 making tax and a \$200 transfer tax on each FRT-15 made and transferred.

For public safety reasons, your cooperation in this matter is essential. Your failure to take the above steps may result in (1) law enforcement action by ATF, including a referral of this matter to the United States Attorney's Office for criminal prosecution; (2) tax assessment and collection; and/or (3) seizure and forfeiture of the firearms and property involved in violations of Federal law.

If you have any questions, and to discuss the plan referenced above, please contact Special Agent in Charge, Tampa Field Division, Craig Saier at 813-202-7300.

Sincerely,



Craig Saier
Special Agent in Charge
Tampa Field Division



U.S. Department of Justice

**Bureau of Alcohol, Tobacco,
Firearms and Explosives**

Martinsburg, WV 25405

www.atf.gov

OCT 8 1 2019
903050:MRC
3311/301071

Exhibit "G"

Dear Mr. Stakes,

This is in reference to your correspondence (including copy of a patent application), with accompanying AR-type fire-control components, received by the Firearms Technology Branch (FTB), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). In your cover letter, you asked FTB to examine this "3MR™" trigger assembly (see enclosed photo) and determine its classification.

For your reference in this matter, the National Firearms Act, 26 U.S.C. Section 5845(b), defines "machinegun" as—

...any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.

As indicated, your prototype trigger has three modes: safe mode, a match grade semi-automatic mode, and another match grade semiautomatic mode with a positive reset characteristic. In support of this product, you point out that it will provide tactical and competition shooters with a "safer, faster, and more reliable trigger group." It is also intended to provide positive resets between each shot.

Mr. Michael Stakes

Page 2

The FTB examination confirmed that the trigger unit consists of a housing, hammer, trigger, disconnecter, selector, springs, and reset lever that are designed to be used in an AR-15 type platform. Our examination disclosed that when the selector is placed in the vertical position (apex at 12 o'clock), the trigger, disconnecter, and hammer function as any AR-semiautomatic type trigger is designed to do. Further examination also showed that when the selector was placed in the horizontal position (apex at 3 o'clock), the reset lever pivots forward, and the hammer engages/contacts the lever during the cycling of the rifle. In this position, the hammer contacts the reset lever during cocking, which applies force to the trigger, forces the shooter's finger forward, and allows the trigger to reset rapidly.

In the course of our evaluation, FTB personnel installed the submitted 3MR™ trigger into an AR-15 type rifle housed in the ATF National Firearms Collection for test firing. During this phase, a function test was performed before live-fire was conducted. The 3MR™ functioned only semi automatically during both the field test and live-firing.

In conclusion, FTB has determined that the 3MR™ trigger assembly is not a part or combination of parts that will convert a semiautomatic firearm into a machinegun. Your sample will be returned via the FedEx account number provided in your cover letter.

We thank you for your inquiry and trust the foregoing has been responsive to your evaluation request.

Sincerely yours,


Earl Griffith
Chief, Firearms Technology Branch

Enclosure

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

**Firearms Technology Criminal Branch
Report of Technical Examination**244 Needy Road #1600
Martinsburg, WV 25405Phone: 304-616-4300
Fax: 304-616-4301**To:**Special Agent Michael T. Nuttall
Bureau of Alcohol, Tobacco, Firearms and Explosives
99 New York Ave NE
MS: 90K-250
Washington, DC 20026**Date:** 10/21/2021**UI#:** 163080-21-0009**RE:** Wide Open Triggers**FTCB#:** 2021-768-CJT
317848**Date Exhibit Received:** 09/24/2021**Type of Examination Requested:****Delivered By:** FedEx 2840 8405 9404

Examination, Test, Classification

Exhibit:

1. Wide Open Enterprises, Wide Open Trigger for AR15, no serial number (suspected machinegun).

Pertinent Authority:

Title 28 of the United States Code (U.S.C.) provides the Bureau of Alcohol, Tobacco Firearms and Explosives (ATF) the authority to investigate criminal and regulatory violations of Federal firearms law at the direction of the Attorney General. Under the corresponding Federal regulation at 28 C.F.R. 0.130 the Attorney General provides ATF with the authority to investigate, administer, and enforce the laws related to firearms, in relevant part, under 18 U.S.C. Chapter 44 (Gun Control Act) and 26 U.S.C. Chapter 53 (National Firearms Act). Pursuant to the aforementioned statutory and regulatory authority, the ATF Firearms and Ammunition Technology Division (FATD) provides expert technical support on firearms and ammunition to federal, state and local law enforcement agencies regarding the Gun Control Act and the National Firearms Act.

The Gun Control Act (GCA), 18 U.S.C. § 921(a)(23), defines the term “**machinegun**” as:

“...has the meaning given such term in section 5845(b) of the National Firearms Act (26 U.S.C. 5845(b)).”

The National Firearms Act (NFA), defines “**firearm**” to mean, in part: “...(6) a machinegun....” (See 26 U.S.C. § 5845(a).)

Pertinent Authority (cont.):

Also, the NFA 26 U.S.C. § 5845(b) defines “**machinegun**” as:

“...any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.”
(See 26 U.S.C. § 5845(b).

The National Firearms Act (NFA), 26 U.S.C. § 5845(a), defines the term “**firearm**” as:

*“...(1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon, as defined, as defined in subsection (e); (6) **a machinegun**; (7) any silencer (as defined in 18 U.S.C. § 921); and (8) a destructive device. The term “firearm” shall not include an antique firearm or any device (other than a machinegun or destructive device) which, although designed as a weapon, the...[Attorney General]...finds by reason of the date of its manufacture, value, design and other characteristics is primarily a collector’s item and is not likely to be used as a weapon.”*

Further, the NFA, 26 U.S.C. § 5842, “**Identification of firearms**,” states:

“... (a) Identification of firearms other than destructive devices. - Each manufacturer and importer and anyone making a firearm shall identify each firearm, other than a destructive device, manufactured, imported, or made by a serial number which may not be readily removed, obliterated, or altered, the name of the manufacturer, importer, or maker, and such other identification as the ...[Attorney General]... may by regulations prescribe. (b) Firearms without serial number. - Any person who possesses a firearm, other than a destructive device, which does not bear the serial number and other information required by subsection (a) of this section shall identify the firearm with a serial number assigned by the ... [Attorney General]... and any other information the...[latter]... may by regulations prescribe.”

27 CFR § 479.11 defines the term “**machinegun**” and includes, in part: *“...For purposes of this definition, the term “automatically” as it modifies “shoots, is designed to shoot, or can be readily restored to shoot,” means functioning as the result of a self-acting or self-regulating mechanism that allows the firing of multiple rounds through a single function of the trigger; and “single function of the trigger” means a single pull of the trigger and analogous motions. The term “machinegun” includes a bump-stock-type device, i.e., a device that allows a semi-automatic firearm to shoot more than one shot with a single pull of the trigger by harnessing the recoil energy of the semiautomatic firearm to which it is affixed so that the trigger resets and continues firing without additional physical manipulation of the trigger by the shooter.”*

Findings:

Exhibit 1 is a Wide Open Enterprises, model Wide Open Trigger (WOT) for AR15, AR15-type drop-in fire-control group, manufactured at an undetermined location, distributed by Wide Open Enterprises in Albuquerque, New Mexico, and marketed by Big Daddy Unlimited of Gainesville, Florida. The Exhibit is not marked with a serial number.

Exhibit 1 is comprised of the following individual component parts:

- One (1) aluminum housing
- One (1) hammer
- One (1) hammer spring
- Two (2) tubular pins
- One (1) trigger
- One (1) trigger spring
- One (1) locking bar
- Three (3) solid pins
- One (1) locking bar spring
- One (1) locking bar guide rod
- Two (2) pins with interior threads at both ends
- Four (4) hex head screws with exterior threads
- Two (2) pin anti walk bars

Exhibit 1 bears the following markings on the right and left side of its aluminum housing:

**PATENT PENDING
WOT
WIDE OPEN TRIGGERS**

The Wide Open Trigger device is designed to allow “drop-in” installation into AR15-type firearms. The device is designed to function in conjunction with a standard weight buffer and M16-type machinegun bolt carrier rather than a standard semiautomatic AR15-type bolt carrier. The M16-type bolt carrier incorporates a contact surface that is unnecessary on AR15-type semiautomatic firearms because this surface is designed to “trip” the auto sear in standard M16-type machineguns. This surface is utilized to similarly “trip” the “locking bar” in WOT equipped AR15-type firearms during the operating cycle. Indeed, it is telling that the M16 pattern bolt carrier assembly interacts with the “locking bar” in the same manner that it interacts with an automatic sear.

Basic operation of the WOT device installed within an AR15-type firearm having a M16-type machinegun bolt carrier is as follows:

- Firearm ready to fire with the hammer in a “cocked” position being held by the sear surface on the front of the trigger.

Finding (Cont.):

- Rearward pressure is applied to “pull” the trigger thus releasing the hammer, which falls impacting the firing pin and discharging the primer, which in turn ignites the propellant powder to accelerate the projectile (bullet) down the rifled bore.
- As the projectile moves past the gas port, a quantity of the gas is bled off through the gas port, gas tube and bolt carrier key into a cylindrical section in the bolt carrier where it expands and drives the bolt carrier rearward. Note that this happens rapidly while rearward “pull” pressure from the trigger pull is generally maintained on the trigger. During the first rearward travel of the carrier assembly, the bolt is rotated by the cam pin acted on by the bolt carrier cam slot. This rotation disengages the bolt lugs from the barrel extension lugs so the bolt is unlocked. The bolt carrier group then continues rearward with the unlocked bolt assembly which starts to act upon the hammer.
- The fired cartridge case is withdrawn from the chamber as the bolt carrier group continues its rearward travel, also continuing to further depress the hammer.
- As the spent case is fully drawn out of the chamber, the spring-loaded ejector, acting against the left side of the case head, pushes the spent case out of the ejection port. The bolt carrier group continues rearward still depressing the hammer.
- At this point, the operation of a firearm with a WOT differs from a semiautomatic AR15-type firearm. In a semiautomatic AR-15-type firearm, the hammer is pushed down by the bolt carrier and is retained by the disconnecter. Upon the shooters release of the trigger, the disconnecter releases the hammer, and the hammer comes to rest on the trigger sear surface, ready to expel a second projectile with a subsequent pull of the trigger. *Conversely*, in the WOT equipped firearm, as the bolt carrier group continues rearward, the hammer is pushed down by the bolt carrier group, but it also pushes down on the trigger which forces it forward. The trigger is pushed slightly forward as an automatic function of the WOT design without any further action by the shooter. This causes the hammer to engage the triggers sear surface. Differing from a standard semiautomatic firearm, the unique WOT trigger design also engages the “locking bar” to momentarily keep the trigger in place so that the shooter may not override the automatic functioning of the weapon.
- As the bolt carrier moves forward into battery using the force of the action spring, the contact surface on the required M16-type machinegun bolt carrier (which is designed to interact with the automatic sear on M16-type firearms), strikes the WOT “locking bar”, releasing the trigger. The necessity of an M16-type machinegun bolt carrier is clear at this point—it acts on the “locking bar” in the same way it acts on the machinegun auto-sear. Specifically, when the bolt moves back in to firing position, it contacts the surface area on the “locking bar” or the auto sear and automatically fires a subsequent round. Note that the disconnecter on the AR15-type semiautomatic retains the hammer until the shooter manually releases the trigger.

Findings (Cont.):

- After firing a shot with a semiautomatic AR15-type firearm, the shooter is required to manually release the trigger which releases the hammer from the disconnecter, and then manually pull the trigger a second time to fire a subsequent shot.
- If the shooter maintains constant rearward pressure from the original single function (pull) of the trigger, the self-acting or self-regulating mechanism of the WOT device allows subsequent projectiles to be fired during the continuing cycle of operation.
- From the moment of the application of trigger pressure, and as long as rearward pressure is applied to the trigger through a single constant pull, a firearm with an WOT continues to fire until the firing finger is removed from the trigger, the weapon malfunctions, or the ammunition is exhausted; this firing takes place regardless of the purported “forced reset” pushing the trigger forward.

Additional rounds are fired based on the automatic functioning of the firearm and the continuous pressure applied to the trigger during the single continuous function (pull) of the trigger. With both an WOT equipped AR15-type firearm, and an M16-type machinegun (with the selector set in its “Full Auto” position), the shooter maintains a constant pull of the trigger to fire subsequent shots with a single function (pull) of the trigger, through both the M16-type machinegun and WOT equipped AR15-types self-acting or self-regulating mechanisms during the operating cycle of the firearms.

To function test the Exhibit 1 WOT device, I installed the Exhibit into an AR15-type firearm obtained from the ATF National Firearms Collection (NFC). The ATF NFC firearm was comprised of a Superior Arms S-15 receiver, M16-type barreled upper assembly (having the required M16-type machinegun bolt carrier), and a standard buffer.

The Exhibit 1 device (installed within the ATF exemplar firearm) was test fired on October 18, 2021, at the ATF test range, Martinsburg, West Virginia, using commercially available, Federal brand, 5.56x45mm caliber ammunition and a magazine from the NFC.

I first inserted one round of ammunition into a magazine, inserted the magazine into the weapon and chambered the cartridge, placed the selector into the “FIRE” position, and pulled the trigger. The NFC exemplar weapon, having the Exhibit 1 device installed, discharged the chambered cartridge, and expelled a projectile by the action of an explosive. I repeated this method of test-fire one additional time, obtaining the same result. I repeated this same test with the magazine being removed after the cartridge was chambered, and noted that the hammer, rather than remaining in a cocked position, as would normally be the case with a standard AR15-type semiautomatic firearm, after firing one round with a single function (pull) of the trigger, had been released a second time, indicating that the Exhibit 1 equipped firearm had initiated a second firing cycle with the original single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

Findings (Cont.):

I next inserted a two-round ammunition load into a magazine, inserted the magazine into the weapon and chambered the cartridge, placed the selector into the "FIRE" position, and pulled the trigger holding it to the rear. The NFC exemplar weapon, having the Exhibit 1 device installed, fired two (2) rounds automatically by a single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

I continued this testing protocol by inserting a five-round ammunition load into a magazine, inserted the magazine into the weapon and chambered the cartridge, placed the selector into the "FIRE" position, and pulled the trigger holding it to the rear. The NFC exemplar weapon, having the Exhibit 1 device installed, fired five (5) rounds automatically by a single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

Next, the NFC exemplar weapon, having the Exhibit 1 device installed, was tested utilizing a common plastic zip-tie to secure the trigger in a "pulled" position, as follows:

- A common plastic 9-3/4-inch plastic zip-tie was installed around rear of the grip and the front of the Exhibit 1 trigger.
- The zip-tie was gradually tightened until the trigger was retracted just enough to allow the hammer to fall.
- With the trigger retained in this position, the bolt assembly was retracted and retained in an open position, with the aid of the bolt catch.
- A five-round ammunition load was placed into the magazine and inserted into the Exhibit 1 equipped ATF exemplar firearm.
- Without touching the trigger (which was being retained in a fixed position by the plastic zip-tie), the bolt catch was depressed allowing the firearm's bolt to travel forward and chamber a cartridge. Upon chambering the cartridge, the weapon fired the entire five-round ammunition load automatically without the trigger being repeatedly pulled and released.
- This same test was repeated a second time with a five-round ammunition load and once with a fifteen-round load. In all instances, the submitted sample discharged its entire ammunition load upon initiating the firing sequence by depressing the bolt release, thus allowing the bolt assembly to move forward and both chamber and fire cartridges repeatedly.

Finally, I repeated the above test protocol with the exception that the common 9-3/4-inch plastic zip-tie was replaced with a ULINE Brand locking galvanized steel aircraft cable seal.

- Without touching the trigger (which was being retained in a fixed position by the ULINE Brand locking cable seal), the bolt catch was depressed allowing the firearm's bolt to travel forward and chamber a cartridge. Upon chambering the cartridge, the weapon fired the entire five-round ammunition load

Findings (Cont.):

automatically without the trigger being repeatedly pulled and released.

- This same test was repeated a second time with a five-round ammunition load and once with a fifteen-round load. In all instances, the submitted sample discharged its entire ammunition load upon initiating the firing sequence by depressing the bolt release, thus allowing the bolt assembly to move forward and both chamber and fire cartridges repeatedly.

The WOT “drop-in” device is uniquely designed to interact with the required M16-type machinegun bolt carrier during the cycle of operation in the same way that the M16-type machinegun bolt interacts with the machinegun auto sear. This allows the weapon to function as a self-acting, or self-regulating mechanism, with one continuous pull of the trigger, and allows the weapon to shoot automatically, more than one shot, without manual reloading, by a single function (pull) of the trigger, until its trigger is released, or the ammunition is exhausted.

While on standard semiautomatic AR15-type firearms, the cycle of operation is interrupted between shots by a disconnecter which requires that the trigger be both manually released and manually pulled to fire a subsequent shot, no such action is required to fire subsequent shots on the WOT equipped AR15-type firearm. Indeed, the WOT design requires only that the shooter maintain the initial trigger pull, while the self-acting or self-regulating WOT mechanism forces the trigger forward during the rearward movement of the required M16-type machinegun bolt carrier, and then automatically releases the trigger and hammer, as the “locking bar” interacts with the “trip surface” on the M16-type machinegun bolt carrier, as the firearm goes into battery. All of these actions occur if the shooter maintains a single, constant pull of the trigger.

It is worth noting that the legislative history for the NFA indicates that the drafters equated a “single function of the trigger” with “single pull of the trigger.” National Firearms Act: Hearings Before the Comm. on Ways and Means, House of Representatives, Second Session on H.R. 9066, 73rd Cong., at 40 (1934). Therefore, consistent with the language of the statute and Congressional intent, ATF has long held that a single function of the trigger is a “single pull” or alternatively, a single release of a trigger.

As received, Exhibit 1 is a combination of parts, designed and intended for use in converting a weapon (AR15-type) into a machinegun; therefore, it is a “**machinegun**” as defined in the GCA and NFA.

Conclusions:

Exhibit 1 is a combination of parts, designed and intended for use in converting a weapon into a machinegun; therefore, it is a “**machinegun**” as defined in 26 U.S.C. § 5845(b).

Exhibit 1 is a “**machinegun**” as defined in 18 U.S.C. § 921(a)(23).

Exhibit 1, being a machinegun, is also a “**firearm**” as defined in 26 U.S.C. § 5845(a)(6).

Exhibit 1 is not marked in accordance with 26 U.S.C. § 5842(a).

Special Agent Michael T. Nuttall

163080-21-0009
2021-768-CJT
Page 8

Examined by:

**CODY
TOY**

Digitally signed by
CODY TOY
Date: 2021.10.21
06:43:25 -04'00'

Cody J. Toy
Firearms Enforcement Officer

Approved by:

**GREGORY
STIMMEL**

Digitally signed by
GREGORY STIMMEL
Date: 2021.10.21
09:06:45 -04'00'

Gregory Stimmel
Chief, Firearms Technology Criminal Branch

Attachments: 14 pages bearing photos.

Enclosed is a Firearms Technology Criminal Branch report provided in response to your request for assistance. Please be aware that these documents constitute “taxpayer return information” that is subject to the strict disclosure limitations provided in 26 U.S.C. § 6103. Exceptions to the non-disclosure provisions that permit the disclosure internally within ATF are set forth in 26 U.S.C. § 6103(h)(2)(C) and (o)(1). Any further disclosure of these reports is strictly limited and must be reviewed and approved by the Office of Chief Counsel prior to any information dissemination. Failure to adhere to the disclosure limitations provided in 26 U.S.C. § 6103 could result in civil and/or criminal liability.

Exhibit 1 as received

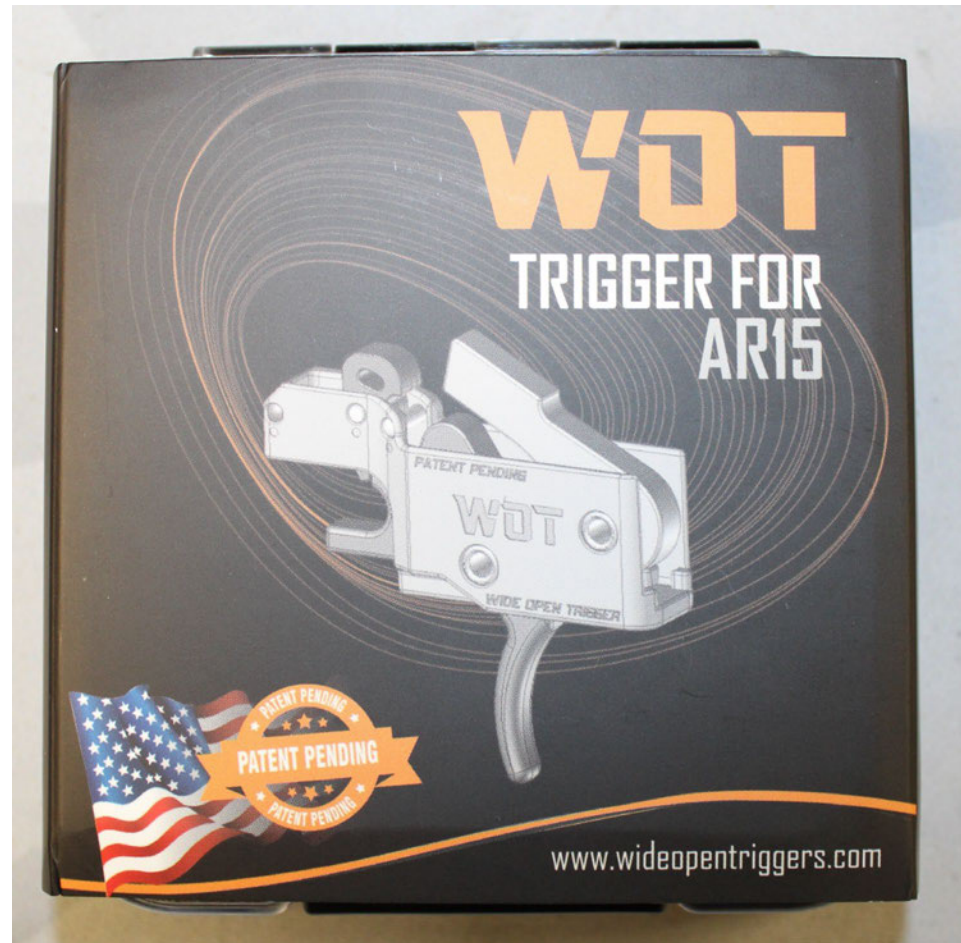


Exhibit 1 as received

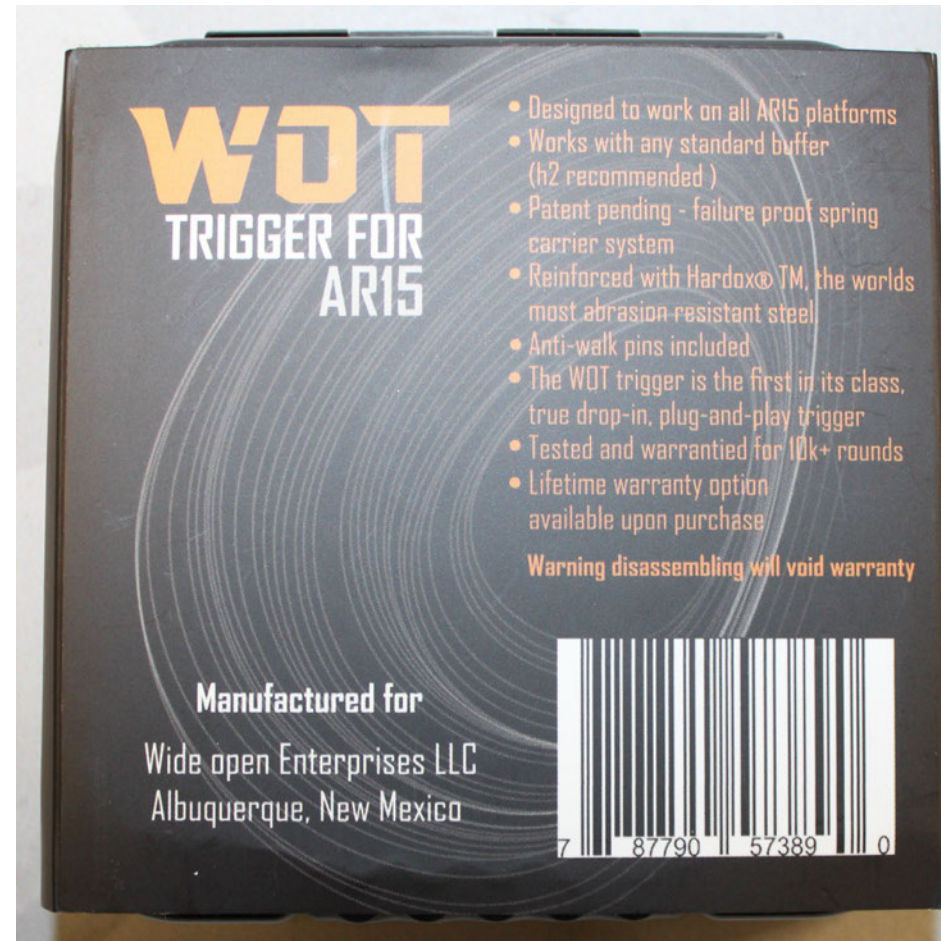


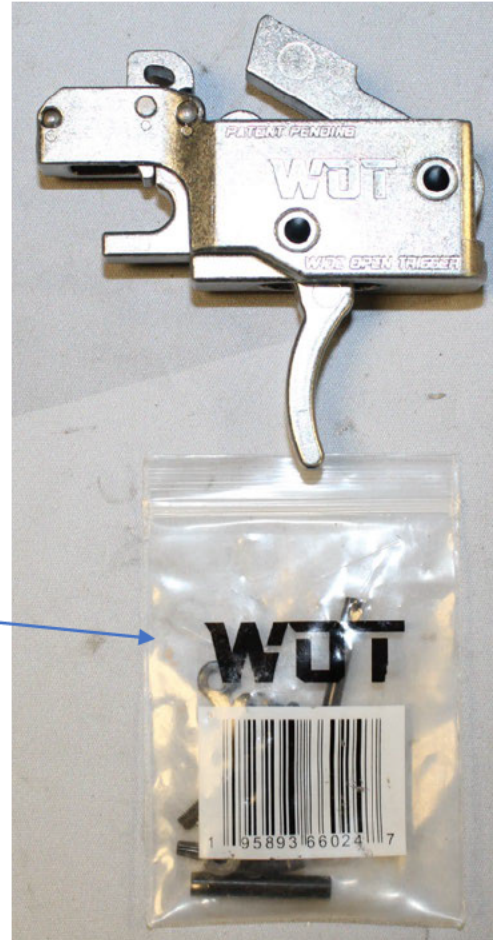
Exhibit 1 inside of case



163080-21-0009 2021-768-CJT

ATF 1063
3

Exhibit 1 parts removed from case



Bag with installation hardware

Exhibit 1 installation hardware



163080-21-0009 2021-768-CJT

ATF 1065
5

Exhibit 1 WOT conversion device

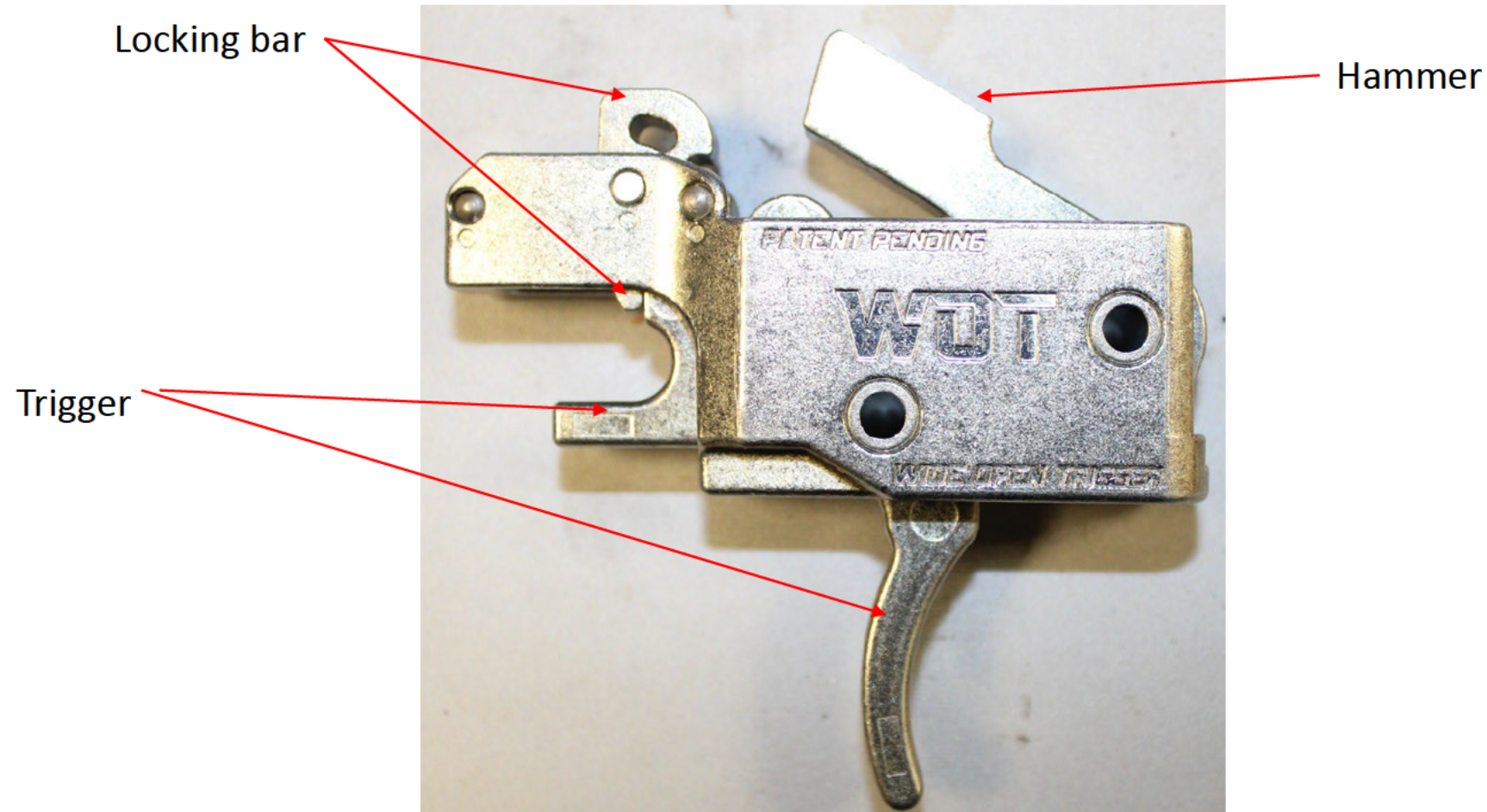


Exhibit 1 WOT conversion device



163080-21-0009 2021-768-CJT

ATF 1067

Exhibit 1 top down view



Exhibit 1 top down view/hammer forward

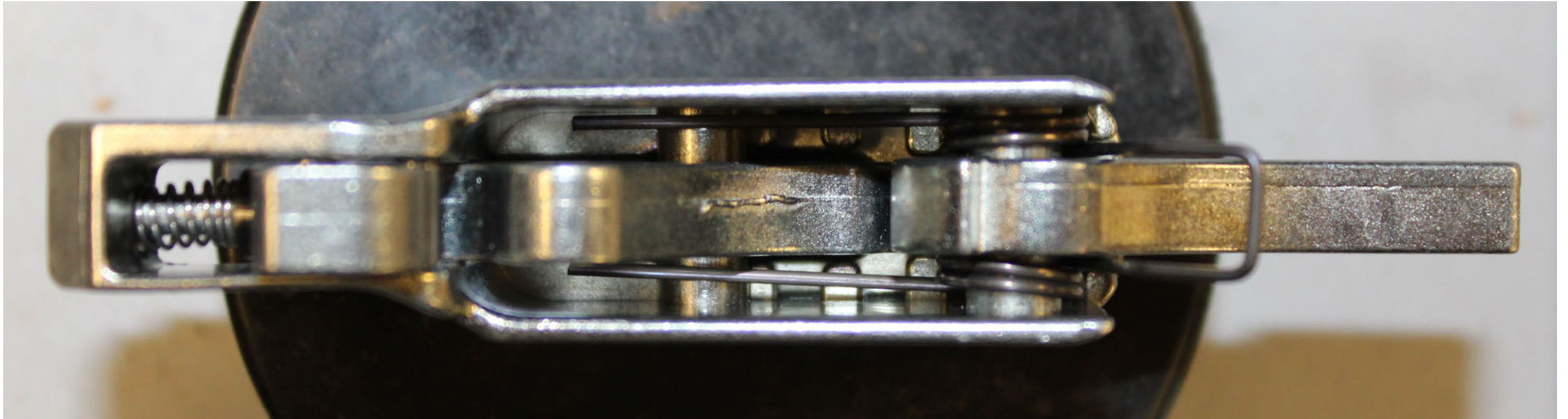


Exhibit 1 installed in NFC S-15



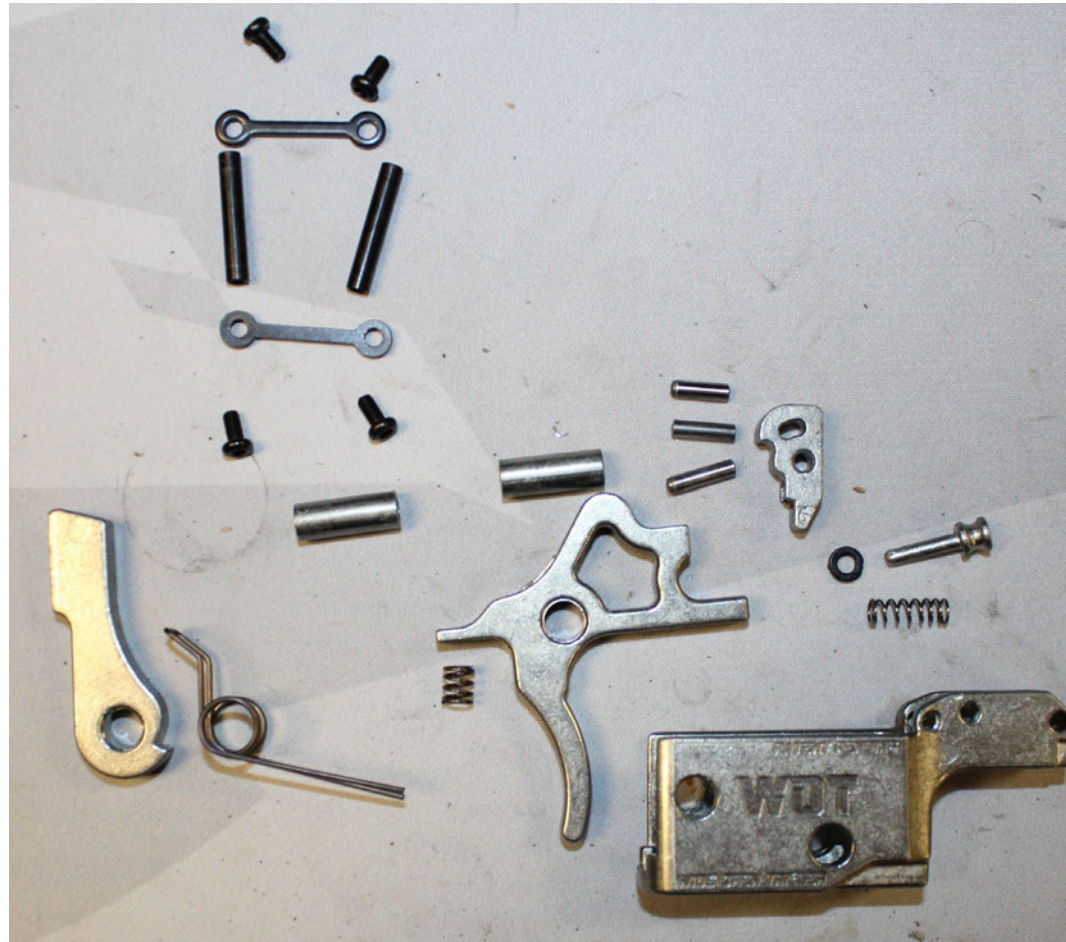
163080-21-0009 2021-768-CJT

ATF 1070
10

Exhibit 1 installed in NFC S-15



Exhibit 1 disassembled



163080-21-0009 2021-768-CJT

ATF 1072
12

NFC S-15 with plastic zip-tie



NFC S-15 with ULINE Brand locking galvanized steel aircraft cable seal




facebook

Watch Home Live Shows Explore

Email or phone Password

Search video



Wide Open Triggers
October 5, 2021 · 43

Are you having issues getting your WOT to cycle? If so, follow these steps.

- 1: Verify that your BCG is full-auto/M-16 profile. If you aren't sure what this means, feel free to send us a DM.
- 2: Try a heavier buffer and/or a stronger spring. The internal design of the WOT imparts additional friction and resistance against the BCG as it returns to battery. This is not present in a standard AR-15 trigger, so a little extra weight and tension forcing the bolt closed may help.
- 3: Ensure that the 5.56/223 barrel length that you are attempting to utilize is at least 10.3" in length. 10.3" is right at the bleeding edge of reliability with a carbine length gas system, so anything shorter presents dwell time and overgassing issues. Other calibers such as 300BLK and 7.62x39 function much differently at different barrel lengths.

See less

Most relevant

Harry Edwards
100% Reliable

Installed my WOT in a "generic" lower with an equally generic 16" upper. Used Springco blue spring and H2 4.6 oz buffer. No issues, no dead trigger events. Tough for me to get off single rounds, but three round bursts were pretty ea... See more

Like Comment Share

37 · 41 Comments · 3.1K Views

Are you having issues getting your WOT to cycle?

If so, follow these steps.

1: Verify that your BCG is full-auto/M-16 profile. If you aren't sure what this means, feel free to send us a DM.

2: Try a heavier buffer and/or a stronger spring. The internal design of the WOT imparts additional friction and resistance against the BCG as it returns to battery. This is not present in a standard AR-15 trigger, so a little extra weight and tension forcing the bolt closed may help.

3: Ensure that the 5.56/223 barrel length that you are attempting to utilize is at least 10.3" in length. 10.3" is right at the bleeding edge of reliability with a carbine length gas system, so anything shorter presents dwell time and overgassing issues. Other calibers such as 300BLK and 7.62x39 function much differently at different lengths, and may require more trial and error. We're not saying that <10.3" firearms can't function with a WOT... but it's not optimal.

4: Once the prior three conditions have been met, run some ammunition through the rifle! Any time additional moving parts are added to a mechanical system, a break-in period is applicable. Many of our testing rifles required a couple magazines worth of ammunition to be fired before consistent rates of fire could be sustained. If these steps are followed, but you still can't get the trigger to function, feel free to reach out via DM, email, or phone call. We're more than happy to help in any way that we can!

[#WOTAR15](#) [#WOT](#) [#WideOpenTrigger](#) [#WideOpenTriggers](#)

See less

U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

**Firearms Technology Criminal Branch
Report of Technical Examination**
**244 Needy Road #1600
Martinsburg, WV 25405**
**Phone: 304-616-4300
Fax: 304-616-4301**
To:

Special Agent Ray Allen
Bureau of Alcohol, Tobacco, Firearms and Explosives
135 West Central Boulevard
Suite 740
Orlando, Florida 32801

Date: 4/01/2022**UI#:** 767070-21-0065**RE:** Wide Open Triggers-
Bosnia**FTCB#:** 2022-455-RKD Exp.
319830**Date Exhibits Received:** 03/23/2022**Type of Examination Requested:****Delivered By:** FedEx 7763 6646 0870

Examination, Test, Classification

Exhibits:

1119. Powered By Graves (PBG) Alamo-15 trigger assembly having no serial number (suspected machinegun).

Pertinent Authority:

Title 28 of the United States Code (U.S.C.) provides the Bureau of Alcohol, Tobacco Firearms and Explosives (ATF) the authority to investigate criminal and regulatory violations of Federal firearms law at the direction of the Attorney General. Under the corresponding Federal regulation at 28 C.F.R. 0.130 the Attorney General provides ATF with the authority to investigate, administer, and enforce the laws related to firearms, in relevant part, under 18 U.S.C. Chapter 44 (Gun Control Act) and 26 U.S.C. Chapter 53 (National Firearms Act). Pursuant to the aforementioned statutory and regulatory authority, the ATF Firearms and Ammunition Technology Division (FATD) provides expert technical support on firearms and ammunition to federal, state and local law enforcement agencies regarding the Gun Control Act and the National Firearms Act.

The Gun Control Act of 1968 (GCA), 18 U.S.C. § 921(a)(3), defines the term “**firearm**” as:

“...(A) any weapon (including a starter gun) which will or is designed to or may readily be converted to expel a projectile by the action of an explosive; (B) the frame or receiver of any such weapon; (C) any firearm muffler or silencer or (D) any destructive device. Such term does not include an antique firearm.”

Pertinent Authority (cont.):

The GCA, 18 U.S.C. § 921(a)(23), defines the term “**machinegun**” as:

“...has the meaning given such term in section 5845(b) of the National Firearms Act (26 U.S.C. 5845(b)).”

The National Firearms Act (NFA), 26 U.S.C. § 5845(a), defines the term “**firearm**” as:

*“...(1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon, as defined, as defined in subsection (e); (6) a **machinegun**; (7) any silencer (as defined in 18 U.S.C. § 921); and (8) a destructive device. The term “firearm” shall not include an antique firearm or any device (other than a machinegun or destructive device) which, although designed as a weapon, the... [Attorney General] ...finds by reason of the date of its manufacture, value, design and other characteristics is primarily a collector’s item and is not likely to be used as a weapon.”*

Also, the NFA 26 U.S.C. § 5845(b) defines “**machinegun**” as:

“...any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any part designed and intended solely and exclusively, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.”
(See 26 U.S.C. § 5845(b).

Further, the NFA, 26 U.S.C. § 5842, “**Identification of firearms**,” states:

“... (a) Identification of firearms other than destructive devices. - Each manufacturer and importer and anyone making a firearm shall identify each firearm, other than a destructive device, manufactured, imported, or made by a serial number which may not be readily removed, obliterated, or altered, the name of the manufacturer, importer, or maker, and such other identification as the ... [Attorney General] ... may by regulations prescribe. (b) Firearms without serial number. - Any person who possesses a firearm, other than a destructive device, which does not bear the serial number and other information required by subsection (a) of this section shall identify the firearm with a serial number assigned by the ... [Attorney General] ... and any other information the...[latter]... may by regulations prescribe.”

27 CFR § 479.11 defines the term “**machinegun**” and includes, in part: *“...For purposes of this definition, the term “automatically” as it modifies “shoots, is designed to shoot, or can be readily restored to shoot,” means functioning as the result of a self-acting or self-regulating mechanism that allows the firing of multiple rounds through a single function of the trigger; and “single function of the trigger” means a single pull of the trigger and analogous motions. The term “machinegun” includes a bump-stock-type device, i.e., a device that allows a semi-automatic firearm to shoot more than one shot with a single pull of the trigger by harnessing the recoil energy of the semiautomatic firearm to which it is affixed so that the trigger resets and continues firing without additional physical manipulation of the trigger by the shooter.”*

Background:

Federal law defines “machinegun,” in relevant part, as “any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger” as well as a “combination of parts designed and intended, for use in converting a weapon into a machinegun.” Legislative history for the NFA indicates that the drafters equated a “single function of the trigger” with “single pull of the trigger.” National Firearms Act: Hearings Before the Comm. on Ways and Means, House of Representatives, Second Session on H.R. 9066, 73rd Cong., at 40 (1934). ATF has long held that a single function of the trigger is a “single pull” or alternatively, a single release of a trigger. Therefore, a firearm is not a machinegun if a projectile is expelled when the trigger is pulled, and a second projectile is expelled when the trigger is released.

Also, Federal courts have noted that automatically means that the weapon “fires repeatedly with a single pull of the trigger.” *Staples v. United States*, 511 U.S. 600, 602 n. 1 (1994). “That is, once its trigger is depressed, the weapon will automatically continue to fire until its trigger is released, or the ammunition is exhausted.” *Id.* Courts have specifically affirmed ATF’s interpretation that a single act of the shooter to initiate the firing sequent is a single function of the trigger. *Akins v. United States*, 312 F. App’x 197, 200 (11th Cir. 2009); *Freedom Ordnance Mfg., Inc. v. Brandon*, No. 3:16-cv-00243-RLY-MPB (S.D. Ind. Mar. 27, 2018). *United States v. Fleischli*, 305 F.3d 643, 655 (7th Cir. 2002)(in which electronic switch was the trigger when it served to initiate the firing sequence and the minigun continued to fire until the switch was turned off or the ammunition was exhausted). In the *Freedom Ordnance* case, the United States District Court of Indiana confirmed that ATF was not arbitrary and capricious in the classification of an “electronic reset assist device” as a machinegun even though the firearm’s trigger reset before each shot by pushing the shooter’s finger forward. *Freedom Ordnance Mfg., Inc.*, No. 3:16-cv-00243-RLY-MPB. In these cases, a firearm is a machinegun when an internal mechanism or operation automatically forces the individual’s finger forward instead of requiring that the shooter release the trigger.

Findings:

Exhibit 1119 is a Powered By Graves (PGB), model Alamo-15, AR15-type drop-in fire-control group, marketed by Big Daddy Unlimited located in Gainesville, Florida. The Exhibit is not marked with a serial number.

Exhibit 1119 is comprised of the following individual component parts:

- One aluminum housing
- One hammer
- One hammer spring
- Two tubular pins
- One trigger
- One “Reset Safety Spring”
- One “Safety Disconnecter”
- One “Safety Locking Bar Retainer Pin”
- One “Safety Locking Bar Spring”
- One “Safety Disconnecter Roller”
- One “Safety Disconnecter Roller Retainer Pin”

Findings (cont.):

- Two pins with interior threads at both ends
- Four hex head screws with exterior threads
- Two Torque wrenches (for installation of assembly into firearm)

Exhibit 1119 bears the following markings on the right side of its aluminum housing:



Exhibit 1119 bears the following markings on the left side of its aluminum housing:



The PBG Alamo-15 device is designed to allow “drop-in” installation into AR-type firearms, and to function in conjunction with an H2/H3 weight buffer and M16-type machinegun bolt carrier rather than a standard semiautomatic AR15-type bolt carrier. (See picture 31 of 31). The M16-type bolt carrier incorporates a contact surface that is unnecessary on AR-type semiautomatic firearms because this surface is designed to “trip” the auto sear in standard M16-type machineguns. This surface is utilized to similarly “trip” the “Safety Disconnect with Roller” in PBG Alamo-15 equipped AR-type firearms during the operating cycle. Indeed, it is telling that the M16 pattern bolt carrier assembly interacts to “trip” the “Safety Disconnect with Roller” in the same manner that it interacts to “trip” the automatic sear in M16-type machineguns.

Basic operation of the PBG Alamo-15 device installed within an AR-type firearm having a M16-type machinegun bolt carrier is as follows:

- Firearm ready to fire with the hammer in a “cocked” position being held by the sear surface on the front of the trigger.
- Rearward pressure is applied to “pull” the trigger thus releasing the hammer, which falls impacting the firing pin and discharging the primer, which in turn ignites the propellant powder to accelerate the projectile (bullet) down the rifled bore.

Findings (cont.):

- As the projectile moves past the gas port, a quantity of the gas is bled off through the gas port, gas tube and bolt carrier key into a cylindrical section in the bolt carrier where it expands and drives the bolt carrier rearward. Note that this happens rapidly while rearward “pull” pressure from the trigger pull is generally maintained on the trigger. During the first rearward travel of the carrier assembly, the bolt is rotated by the cam pin acted on by the bolt carrier cam slot. This rotation disengages the bolt lugs from the barrel extension lugs so the bolt is unlocked. The bolt carrier group then continues rearward with the unlocked bolt assembly which starts to act upon the hammer.
- The fired cartridge case is withdrawn from the chamber as the bolt carrier group continues its rearward travel, also continuing to further depress the hammer.
- As the spent case is fully drawn out of the chamber, the spring-loaded ejector, acting against the left side of the case head, pushes the spent case out of the ejection port. The bolt carrier group continues rearward still depressing the hammer.
- At this point, the operation of a firearm with a PBG Alamo-15 differs from a semiautomatic AR-type firearm. In a semiautomatic AR-type firearm, the hammer is pushed down by the bolt carrier and is retained by the disconnecter. Upon the shooters release of the trigger, the disconnecter releases the hammer, and the hammer comes to rest on the trigger sear surface, ready to expel a second projectile with a subsequent pull of the trigger. *Conversely*, in the PBG Alamo-15 equipped firearm, as the bolt carrier group continues rearward, the hammer is pushed down by the bolt carrier group, but it also pushes down on the trigger which forces it forward. (Picture 12 of 31). The trigger is pushed slightly forward as an automatic function of the PBG design without any further action by the shooter. (Picture 13 of 31). This causes the hammer to engage the triggers sear surface. Differing from a standard semiautomatic firearm, the unique PBG Alamo-15 trigger design also engages the “Safety Disconnecter with Roller” to momentarily keep the trigger in place so that the shooter may not override the automatic functioning of the weapon. (Picture 13 of 31).
- As the bolt carrier moves forward into battery using the force of the action spring, the contact surface on the required M16-type machinegun bolt carrier (which is designed to interact with the automatic sear on M16-type firearms), strikes the PBG Alamo-15 “Safety Disconnecter with Roller”, releasing the trigger. (Picture 14 of 31). The necessity of an M16-type machinegun bolt carrier is clear at this point—it acts on the “Safety Disconnecter with Roller” in the same way it acts on the machinegun auto-sear. Specifically, when the bolt moves back in to firing position, it contacts the “Roller” on the “Safety Disconnecter” or the auto sear and automatically fires a subsequent round. (Picture 15 and 16 of 31). Note that the disconnecter on a standard AR-type semiautomatic (without a PBG Alamo-15 device) retains the hammer until the shooter manually releases the trigger.
- After firing a shot with a semiautomatic AR-type firearm, the shooter is required to manually release the trigger which releases the hammer from the disconnecter, and then manually pull the trigger a second time to fire a subsequent shot.

Findings (cont.):

- If the shooter maintains constant rearward pressure from the original single function (pull) of the trigger, the self-acting or self-regulating mechanism of the PBG Alamo-15 device allows subsequent projectiles to be fired during the continuing cycle of operation.
- From the moment of the application of trigger pressure, and as long as rearward pressure is applied to the trigger through a single constant pull, a firearm with an PBG Alamo-15 device continues to fire until the firing finger is removed from the trigger, the weapon malfunctions, or the ammunition is exhausted; this firing takes place regardless of the purported “forced reset” pushing the trigger forward.

Additional rounds are fired based on the automatic functioning of the firearm and the continuous pressure applied to the trigger during the single continuous function (pull) of the trigger. With both a PBG Alamo-15 equipped AR-type firearm, and an M16-type machinegun (with the selector set in its “Full Auto” position), the shooter maintains a constant pull of the trigger to fire subsequent shots with a single function (pull) of the trigger, through both the M16-type machinegun and PBG Alamo-15 equipped AR-types self-acting or self-regulating mechanisms during the operating cycle of the firearms.

To function test the Exhibit 1119 PBG Alamo-15 device, I installed the Exhibit into an AR15-type firearm obtained from the ATF National Firearms Collection (NFC). The ATF NFC firearm was comprised of a Bushmaster AR15-type receiver, and an upper barreled assembly (having the required M16-type machinegun bolt carrier), and an H3 buffer (See attachment).

The Exhibit 1119 device (installed within the ATF exemplar firearm) was test fired on March 28 and 29, 2022, at the ATF test range, in Martinsburg, West Virginia, using commercially available, Federal brand, 5.56x45mm caliber ammunition and a magazine from the NFC.

I first inserted one round of ammunition into a magazine, inserted the magazine into the weapon and chambered the cartridge, placed the selector into the “FIRE” position, and pulled the trigger. The NFC exemplar weapon, having the Exhibit 1119 device installed, discharged the chambered cartridge, and expelled a projectile by the action of an explosive. I repeated this method of test-fire one additional time, obtaining the same result. I repeated this same test with the magazine being removed after the cartridge was chambered, and noted that the hammer, rather than remaining in a cocked position, as would normally be the case with a standard AR15-type semiautomatic firearm, after firing one round with a single function (pull) of the trigger, had been released a second time, indicating that the Exhibit 1119 equipped firearm had initiated a second firing cycle with the original single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

I next inserted a two-round ammunition load into a magazine, inserted the magazine into the weapon and chambered the cartridge, placed the selector into the “FIRE” position, and pulled the trigger holding it to the rear. The NFC exemplar weapon, having the Exhibit 119 device installed, fired two rounds automatically by a single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

I continued this testing protocol by inserting a five-round ammunition load into a magazine, inserting the magazine into the weapon and chambered the cartridge, placing the selector into the “FIRE” position, and

Findings (cont.):

pulling the trigger and holding it to the rear. The NFC exemplar weapon, having the Exhibit 1119 device installed, fired five rounds automatically by a single function (pull) of the trigger. I repeated this method of test-fire one additional time, obtaining the same result.

Next, the NFC exemplar weapon, having the Exhibit 1119 device installed was tested utilizing a common plastic zip-tie to secure the trigger with an inanimate object in a “pulled” position (pictures 26 and 27 of 31), was tested as follows:

- A common plastic 9-3/4-inch plastic zip-tie was installed around rear of the grip and the front of the Exhibit 1119 trigger.
- The zip-tie was gradually tightened until the trigger was retracted just enough to allow the hammer to fall.
- With the trigger retained in this position, the bolt assembly was retracted and retained in an open position, with the aid of the bolt catch.
- A five-round ammunition load was placed into the magazine and inserted into the Exhibit 1119 equipped ATF exemplar firearm.
- Without touching the trigger (which was being retained in a fixed position by the plastic zip-tie), the bolt catch was depressed allowing the firearm’s bolt to travel forward and chamber a cartridge. Upon chambering the cartridge, the weapon fired the entire five-round ammunition load automatically without the trigger being repeatedly pulled and released.
- This same test was repeated a second time with a five-round ammunition load and twice with a fifteen-round load. In all instances, the submitted sample discharged its entire ammunition load upon initiating the firing sequence by depressing the bolt release, thus allowing the bolt assembly to move forward and both chamber and fire cartridges repeatedly.

I then repeated the above test protocol with the exception that the common 9-3/4-inch plastic zip-tie was replaced with a ULINE Brand locking galvanized steel aircraft cable seal. (Picture 28 of 31).

- Without touching the trigger (which was being retained in a fixed position by the ULINE Brand locking cable seal), the bolt catch was depressed allowing the firearm’s bolt to travel forward and chamber a cartridge. Upon chambering the cartridge, the weapon fired the entire five-round ammunition load automatically without the trigger being repeatedly pulled and released.
- This same test was repeated a second time with a five-round ammunition load and once with a fifteen-round load. In all instances, the submitted sample discharged its entire ammunition load upon initiating the firing sequence by depressing the bolt release, thus allowing the bolt assembly to move forward and both chamber and fire cartridges repeatedly.

Findings (cont.):

Finally, while not being a determinative factor in a “machinegun” classification, a “rate of fire” comparison was performed between an actual M16-type, M4 “machinegun”, and a PBG Alamo-15 equipped AR-15 type firearm, to illustrate the similar rates of “automatic” fire achieved with both systems.

The statutory definition of “machinegun” does not include a particular rate of fire that a weapon must achieve to be so classified. However, the “rate of fire” is a common and useful test to demonstrate the objective mechanical capabilities of a firearm, particularly when a shooter maintains a single constant pull of the trigger. This is the case because the single, constant pull of a trigger eliminates the most obvious variable-the speed at which a shooter is able to pull the trigger.

For informational purposes, the cyclic rate of fire of an M16-type, M4 machinegun is approximately 700 to 970 rounds-per-minute (RPM) as published in U.S. Army Technical Manual TM 9-1005-319-10, page 0002 00-3. To verify this, FTCB tested the rate of a 5.56mm caliber NFC M16-type, M4 machinegun, (tag number 0488490) utilizing a Competition Electronics brand shot timer to measure the approximate RPM. This test determined that the average rate of fire of an M16-type, M4 machinegun is 883 RPM. (Picture 29 of 31).

To demonstrate that the cyclic rate of fire with an PBG Alamo-15 machinegun conversion device equipped semiautomatic AR-type rifle is comparable to an M16-type machinegun, the same test was conducted utilizing an NFC AR-type semiautomatic rifle receiver (tag number 539054) equipped with the Exhibit 1119 PBG Alamo-15 machinegun conversion device and utilized the same upper assembly, buffer and recoil spring used with the NFC M16 rate of fire test. This test determined that the average rate of fire of a semiautomatic AR-type rifle equipped with the Exhibit 1119 PBG Alamo-15 machinegun conversion device is 880 RPM. (Picture 30 of 31).

It is significant to note that following the above outlined test procedure, with similar magazines and ammunition obtained from the same lot, that the measured rate of automatic fire when both triggers were held to the rear with a single constant pull was virtually identical, with less than a one percent difference (883/880) in both weapons automatic cyclic rates.

The PBG Alamo-15 “drop-in” device is uniquely designed to interact with the required M16-type machinegun bolt carrier during the cycle of operation in the same way that the M16-type machinegun bolt interacts with the machinegun auto sear. This allows the firearm to function as a self-acting, or self-regulating mechanism, with one continuous pull of the trigger, and allows the firearm to shoot automatically, more than one shot, without manual reloading, by a single function (pull) of the trigger, until its trigger is released, or the ammunition is exhausted.

With standard semiautomatic AR-type firearms, the cycle of operation is interrupted between shots by a disconnecter which requires that the trigger be both manually released and manually pulled to fire a subsequent shot, no such action is required to fire subsequent shots on the PBG Alamo-15 equipped AR-type firearm. Indeed, the PBG Alamo-15 design requires only that the shooter maintain the initial trigger pull, while the self-acting or self-regulating PBG mechanism forces the trigger forward during the rearward movement of the required M16-type machinegun bolt carrier, and then automatically releases the trigger and hammer, as the “Safety Disconnecter with Roller” interacts with the “trip surface” on the M16-type machinegun bolt carrier, as

Special Agent Ray Allen

767070-21-0065
2022-455-RKD
Page 9

Findings (cont.):

the firearm goes into battery. All of these actions occur if the shooter maintains a single, constant pull of the trigger.

Therefore, consistent with the language of the statute and Congressional intent, ATF has long held that a single function of the trigger is a “single pull” or alternatively, a single release of a trigger.

As received, Exhibit 1119 is a combination of parts, designed and intended for use in converting a weapon (AR15-type) into a machinegun; therefore, it is a “**machinegun**” as defined in the GCA and NFA.

Conclusions:

Exhibit 1119, being a combination of parts, designed and intended for use in converting a weapon into a machinegun; therefore, is a “**machinegun**” as defined in 26 U.S.C. § 5845(b).

Exhibit 1119 is a “**machinegun**” as defined in 18 U.S.C. § 921(a)(23).

Exhibit 1119, being a machinegun, is also a “**firearm**” as defined in 26 U.S.C. § 5845(a)(6).

Exhibit 1119 is not marked in accordance with 26 U.S.C. § 5842(a).

Examined by:

**RONALD
DAVIS**

Digitally signed by
RONALD DAVIS
Date: 2022.04.01
10:25:04 -04'00'

Ronald K. Davis
Firearms Enforcement Officer

Approved by:

**GREGORY
STIMMEL**

Digitally signed by
GREGORY STIMMEL
Date: 2022.04.01
11:34:40 -04'00'

Gregory S. Stimmel
Chief, Firearms Technology Criminal Branch

Attachments: 31 pages bearing 39 photos or images.

Enclosed is a Firearms Technology Criminal Branch report provided in response to your request for assistance. Please be aware that these documents constitute “taxpayer return information” that is

subject to the strict disclosure limitations provided in 26 U.S.C. § 6103. Exceptions to the non-disclosure provisions that permit the disclosure internally within ATF are set forth in 26 U.S.C. §§ 6103(h)(2)(C) and (o)(1). Any further disclosure of these reports is strictly limited and must be reviewed and approved by the Office of Chief Counsel prior to any information dissemination. Failure to adhere to the disclosure limitations provided in 26 U.S.C. § 6103 could result in civil and/or criminal liability.

“Powered By Graves Alamo-15” advertising posted on <https://bigdaddyunlimited.com> site.

INTRODUCING THE POWERED BY GRAVES ALAMO-15

Featuring the Patent-Pending Graves Roller Technology



“Powered By Graves Alamo-15” advertising posted on <https://bigdaddyunlimited.com> site.

WATCH: DENNY CHAPMAN REVIEWS THE ALAMO-15 AR TRIGGER

Denny Chapman on the Alamo-15

"EVERY SHOT IS THE SWEET SPOT."

-DENNY CHAPMAN

Share

Watch on YouTube

ATF 1087

PRE-RELEASE SALE TO MEMBERS OF THE BIG DADDY COMMUNITY ONLY



Decades of engineering and innovation have brought us to the apex in trigger technology.

The Powered By Graves Alamo-15 allows you to shoot faster than you ever thought possible. It's Damn Fast. Become a member today to gain exclusive access to the trigger that will help you reach peak shooting performance.

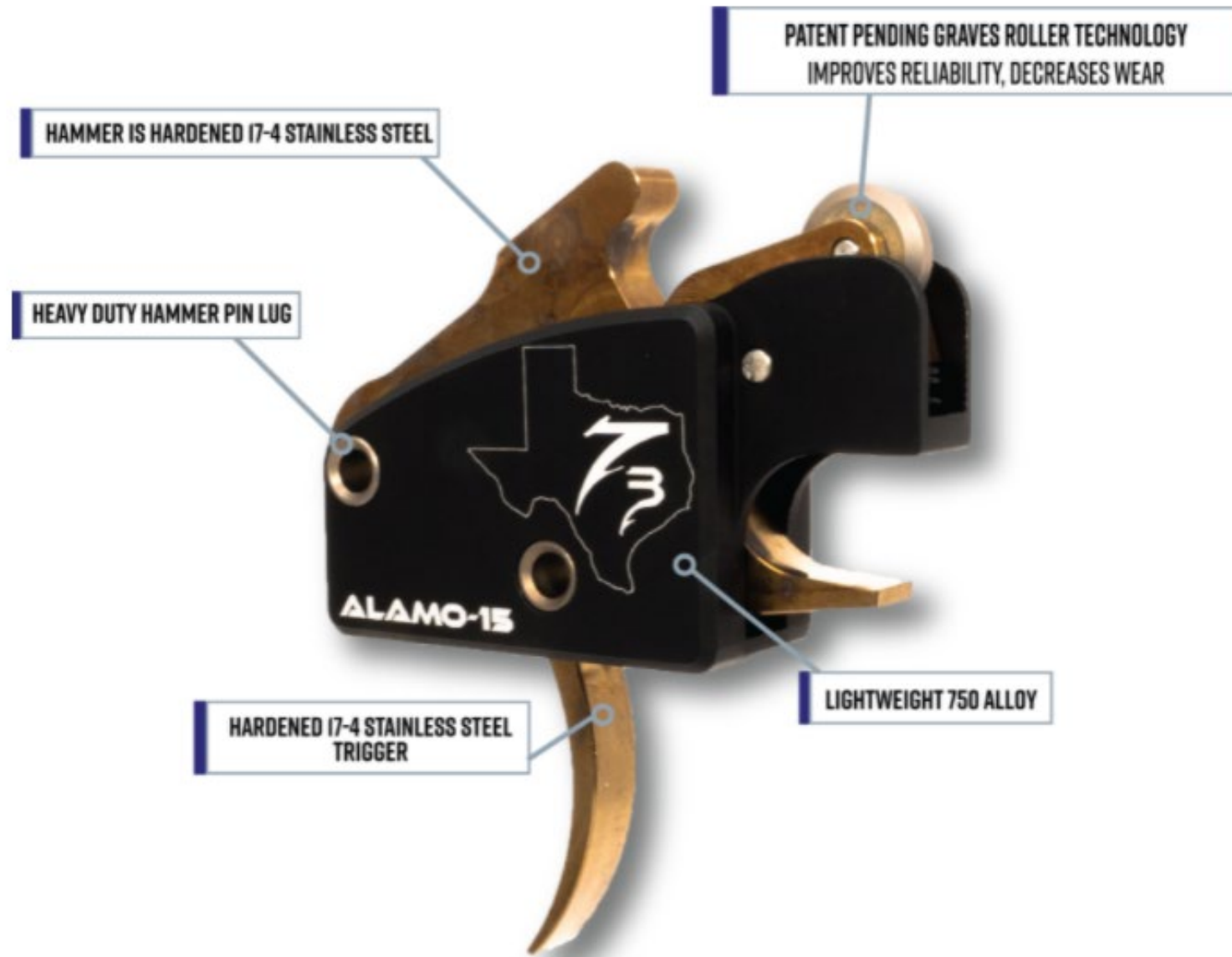
Pre-released exclusively to BDU Members, the all-new Alamo-15 Positive Displacement Trigger is now available.

If you are a member, login now to purchase. If you aren't a member yet, click the button below and get started for \$0.99 cents.

JOIN NOW OR LOG IN

“Powered By Graves Alamo-15” advertising posted on <https://bigdaddyunlimited.com> site. Still image taken at 00:30 in video showing cartridge cases being ejected from firearm.





“Powered By Graves Alamo-15” advertising posted on <https://bigdaddyunlimited.com> site.

JOIN THE BIG DADDY UNLIMITED COMMUNITY FOR JUST \$0.99 CENTS AND GET BIG SAVINGS ON THE ALAMO-15

Pre-released exclusively to BDU Members, the all-new Alamo-15 Positive Displacement Trigger is now available.

If you are a member, login now to purchase. If you aren't a member yet, click the button below and get started for \$0.99 cents.

JOIN NOW OR LOG IN



FREQUENTLY ASKED QUESTIONS

1) Is the Powered By Graves (PBG) ALAMO-15 AR trigger legal to own?

The ALAMO-15 does not make your firearm a full-auto machine gun. Due to its patent-pending design, it only allows one round for each pull of the trigger.

2) What makes the Powered By Graves (PBG) ALAMO-15 the best trigger on the market?

The PBG ALAMO-15 AR trigger has the patent-pending Graves Roller Technology that improves reliability, reduces friction, eliminates wear and tear found on other triggers and BCGs, increases the life of the trigger, speeds up the shooting cycle, and provides an unbelievable shooting experience. It's fast. How fast? DAMN FAST!

3) Can I install the Powered By Graves (PBG) ALAMO-15 AR trigger on a 300 AAC Blackout AR?

Yes, it can be tuned to work. We recommend having it installed by a professional gunsmith. You will need to "tune" the buffer and gas block (if you have one) on your rifle. It takes time to tune the PBG ALAMO-15 trigger because 300 AAC Blackout rounds have lower velocities than the 5.56 round. We recommend that you use a mil-spec lower with standard H2 or H3 buffer and an M16 bolt carrier group (BCG).

4) What is required for the Powered by Graves (PBG) ALAMO-15 AR trigger for it to run properly?

A mil-spec lower with an M16 bolt carrier group (BCG) and a standard H2 or H3 buffer are required for the proper operation of the PBG ALAMO-15 trigger.

5) What sort of warranty comes with the Powered by Graves (PBG) ALAMO-15 AR trigger?

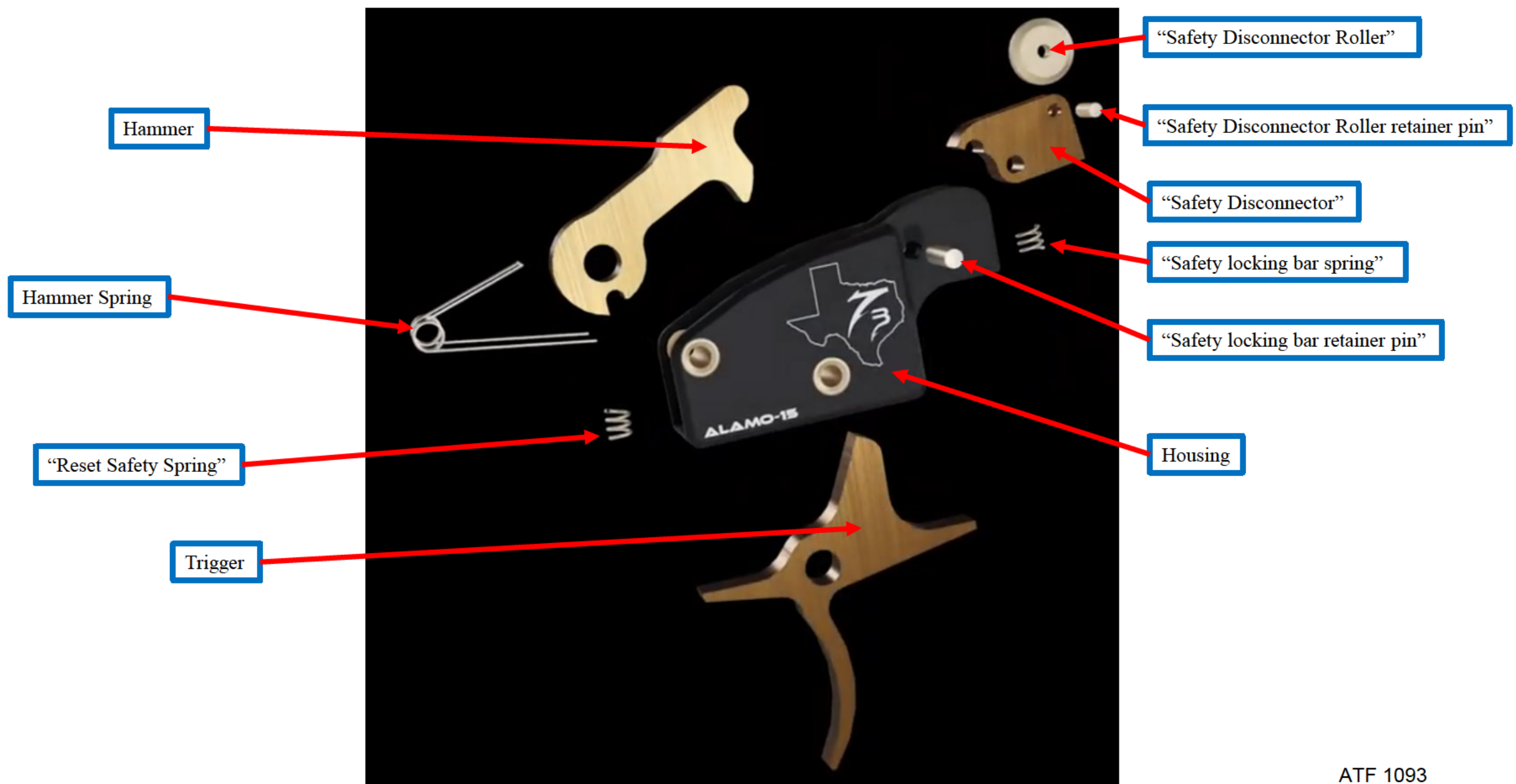
The PBG ALAMO-15 trigger comes with a 30-day "no bullshit" warranty. If your ALAMO-15 breaks or becomes defective during that time, it will be repaired or replaced—at no charge to you. Normal wear-and-tear does not qualify as a defect.

The does not cover loss, theft, deliberate damage, disassembly, or cosmetic damage that does not hinder the performance of the product. The warranty is non-transferable.

6) How long will it take for my trigger to arrive?

We use USPS (and UPS) for all of our shipping. Depending on the day and time your package is picked up and received by USPS, there is an approximately 7 to 10 day window for delivery.

Still image pulled from Alamo-15 animation imbedded with in YouTube "Denny Chapman on the Alamo-15" video posted on <https://bigdaddyunlimited.com> site. All highlights and text added.



767070-21-0065

ATF 1093

Still image pulled from Alamo-15 animation imbedded with in YouTube "Denny Chapman on the Alamo-15" video posted on <https://bigdaddyunlimited.com> site.



ATF 1094

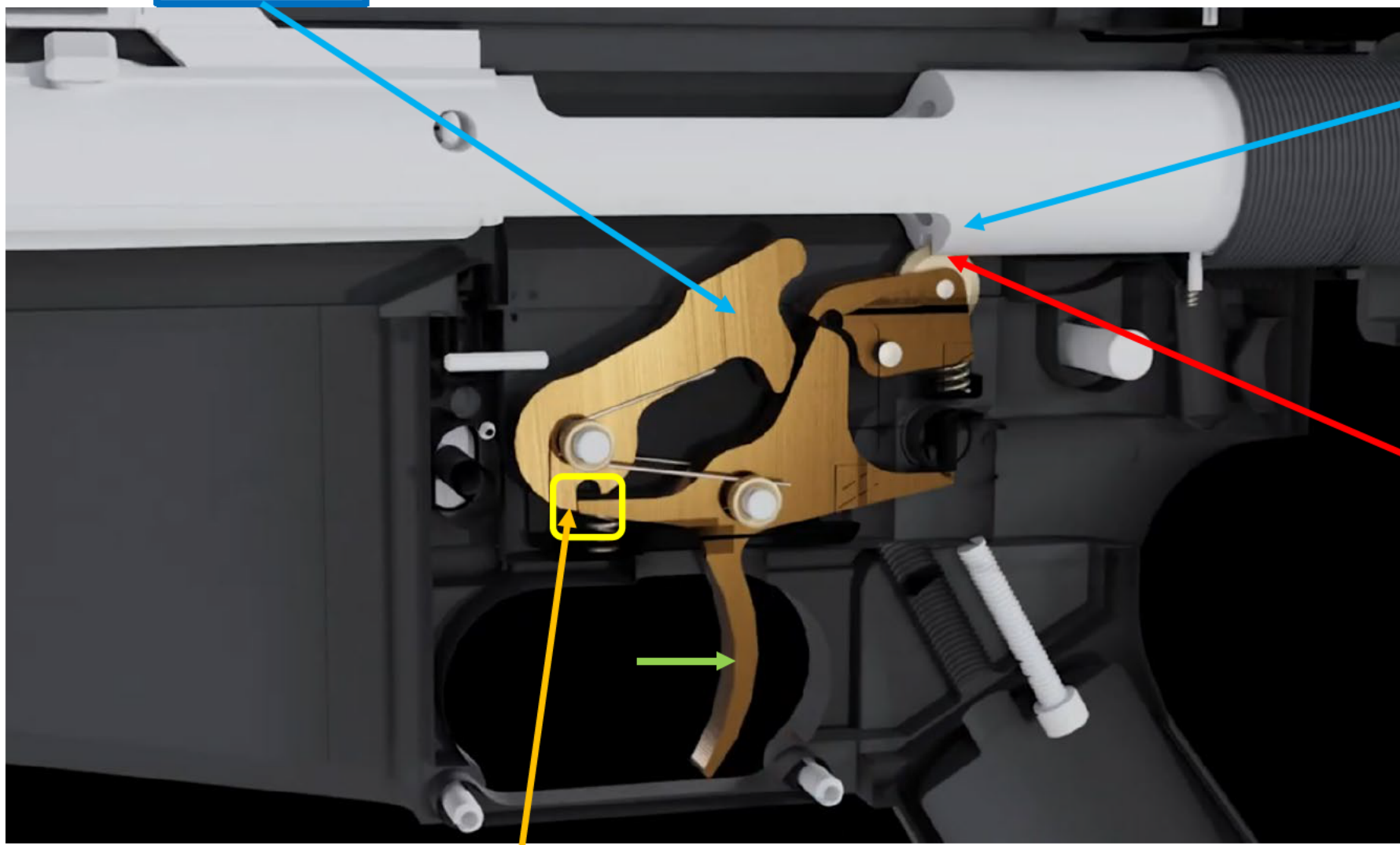
767070-21-0065

Still image pulled from Alamo-15 animation imbedded with in YouTube "Denny Chapman on the Alamo-15 Case poster on https://bigcountryminutemen.com Site: 4/20/21 Highlight and Text added. Case 4:23-cv-00839-0 Document 77-17 Filed 12/01/23 Page 77 of 89 PageID 3860

Hammer cocked.

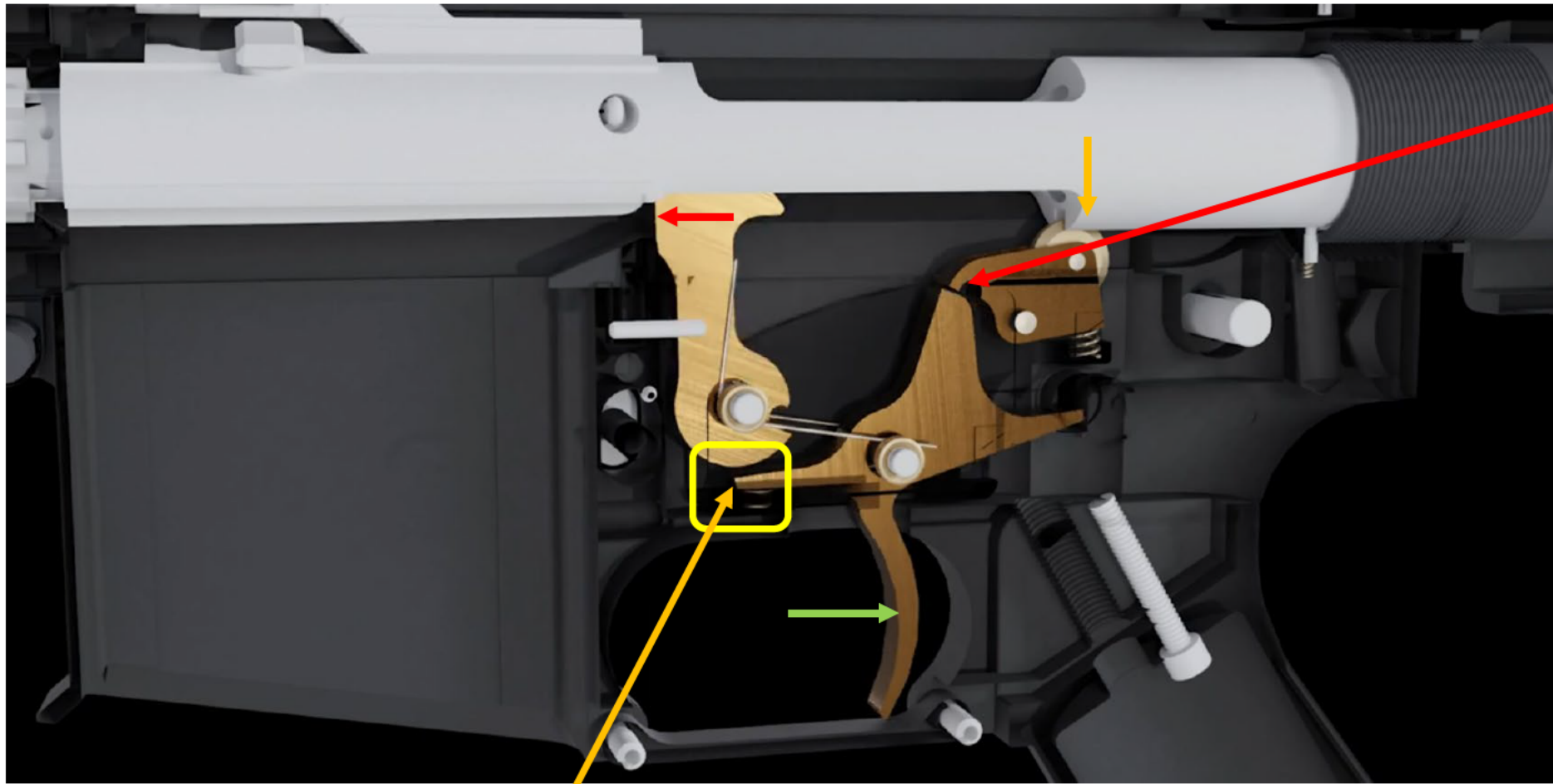
Required M16-type machinegun bolt carrier. Note that this bolt carrier is not required for standard semiautomatic AR-15 type firearms and it incorporates an added surface designed to interact with the automatic sear in a machinegun.

"Safety Disconnect with roller" has been "tripped" down by contact with the required M16-type machinegun bolt carrier.



When the trigger is first pulled with the Alamo-15 equipped weapon in battery having a cartridge chambered, it causes the sear (located on the front of the trigger), to release the hammer.

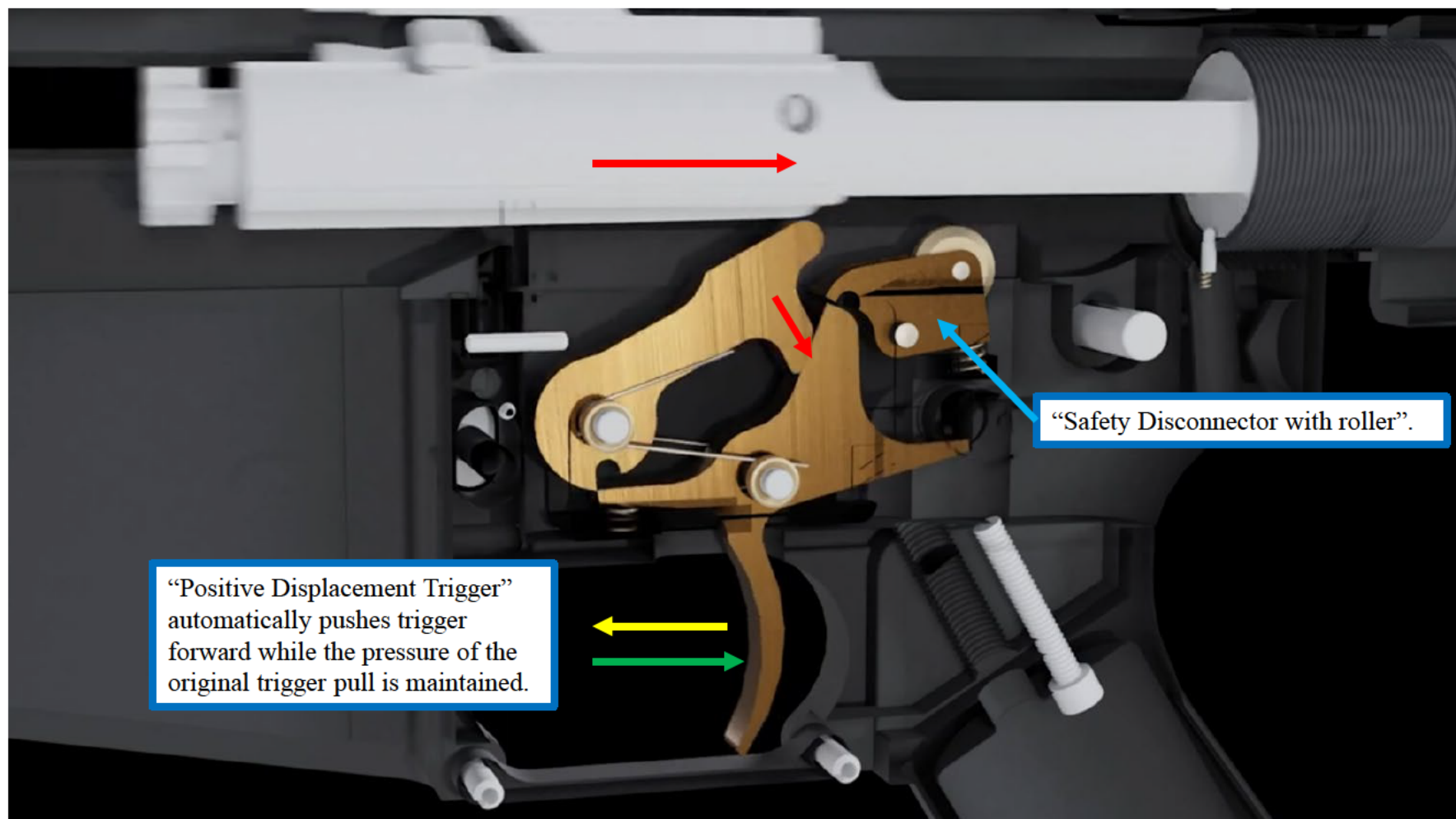
Still image pulled from Alamo-15 animation imbedded with in YouTube "Denny Chapman on the Alamo-15" video posted on <https://bigdaddyunlimited.com> site. ATF highlights and text added.



Required M16-type machinegun bolt carrier depressing or "tripping" "Safety Disconnecter with roller" when firearm is in battery, allowing the forward hook on the "Safety Disconnecter" to clear trigger.

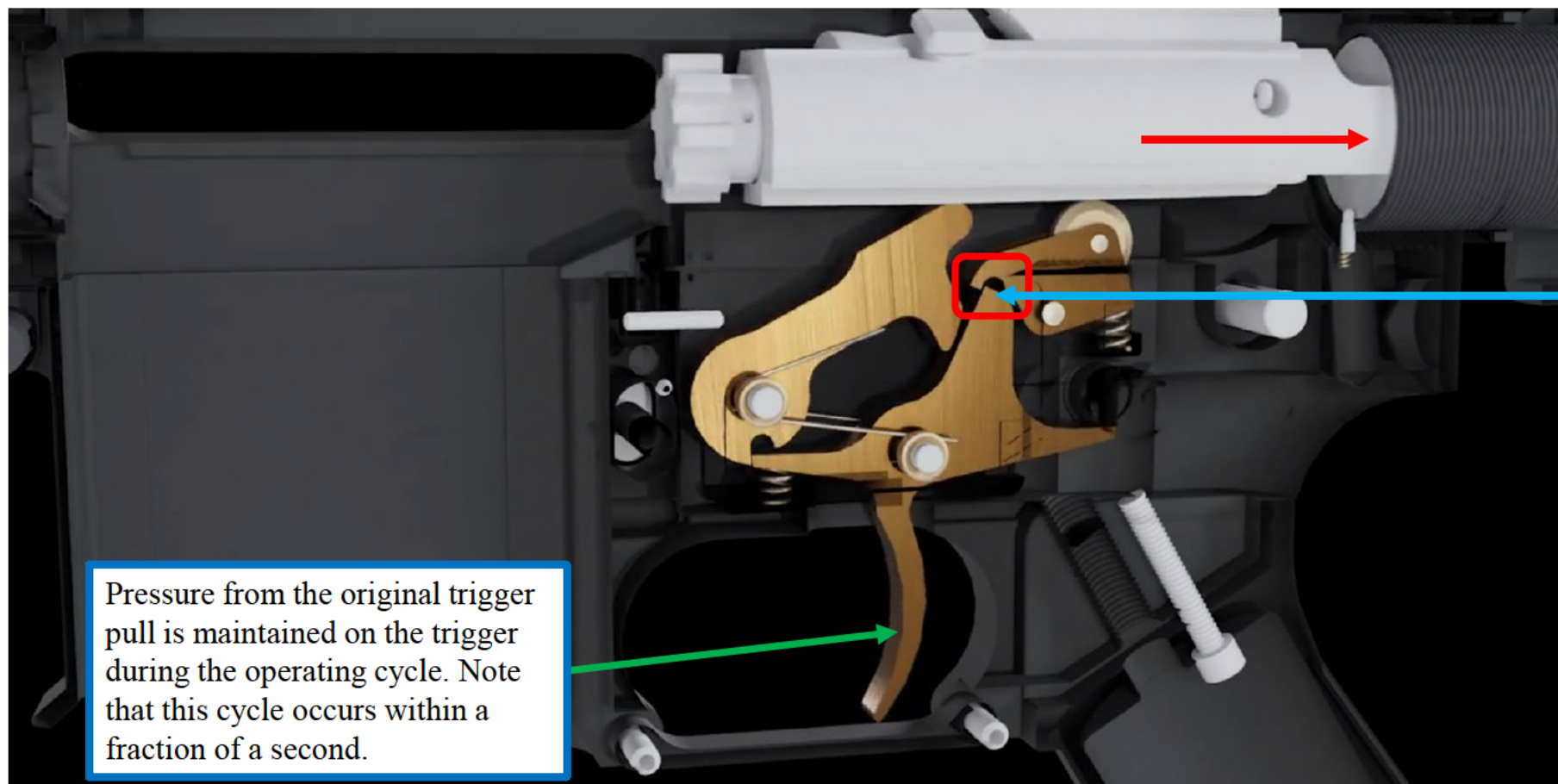
Alamo-15 equipped weapon having the trigger pulled to the rear. The sear, now clear of the hammer, allows the hammer to fall, striking the firing pin and firing the chambered cartridge.

Still image pulled from Alamo-15 animation imbedded with in YouTube "Denny Chapman on the Alamo-15 video posted on <https://bigdaddygunsmunited.com> site. ATF highlights and text added.



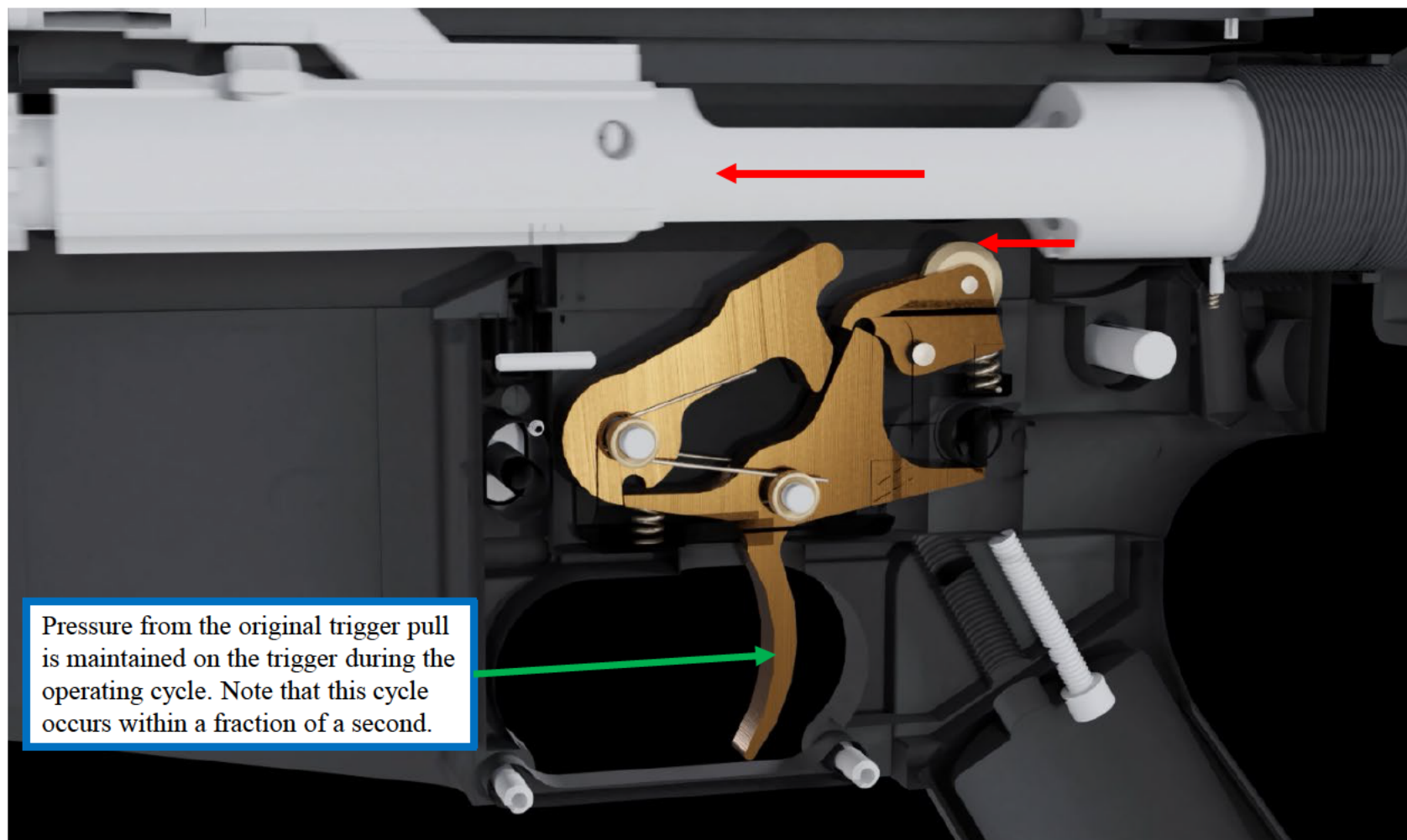
After the chambered cartridge is fired, the pressure of the gas generated by the burning propellant drives the projectile down the barrel and past the gas port, a small quantity of the gas is bled off through the gas port, gas tube and bolt carrier key into a cylindrical section in the bolt carrier where it expands and drives the bolt carrier rearward. Note that this happens rapidly while rearward “pull” pressure from the trigger pull is maintained on the trigger. During the first rearward travel of the carrier, the bolt is rotated by the cam pin acted on by the bolt carrier cam slot. This rotation disengages the bolt lugs from the barrel extension lugs so the bolt is unlocked. The bolt carrier group then continues rearward with the unlocked bolt assembly which starts to act upon the hammer.

ATF 1097



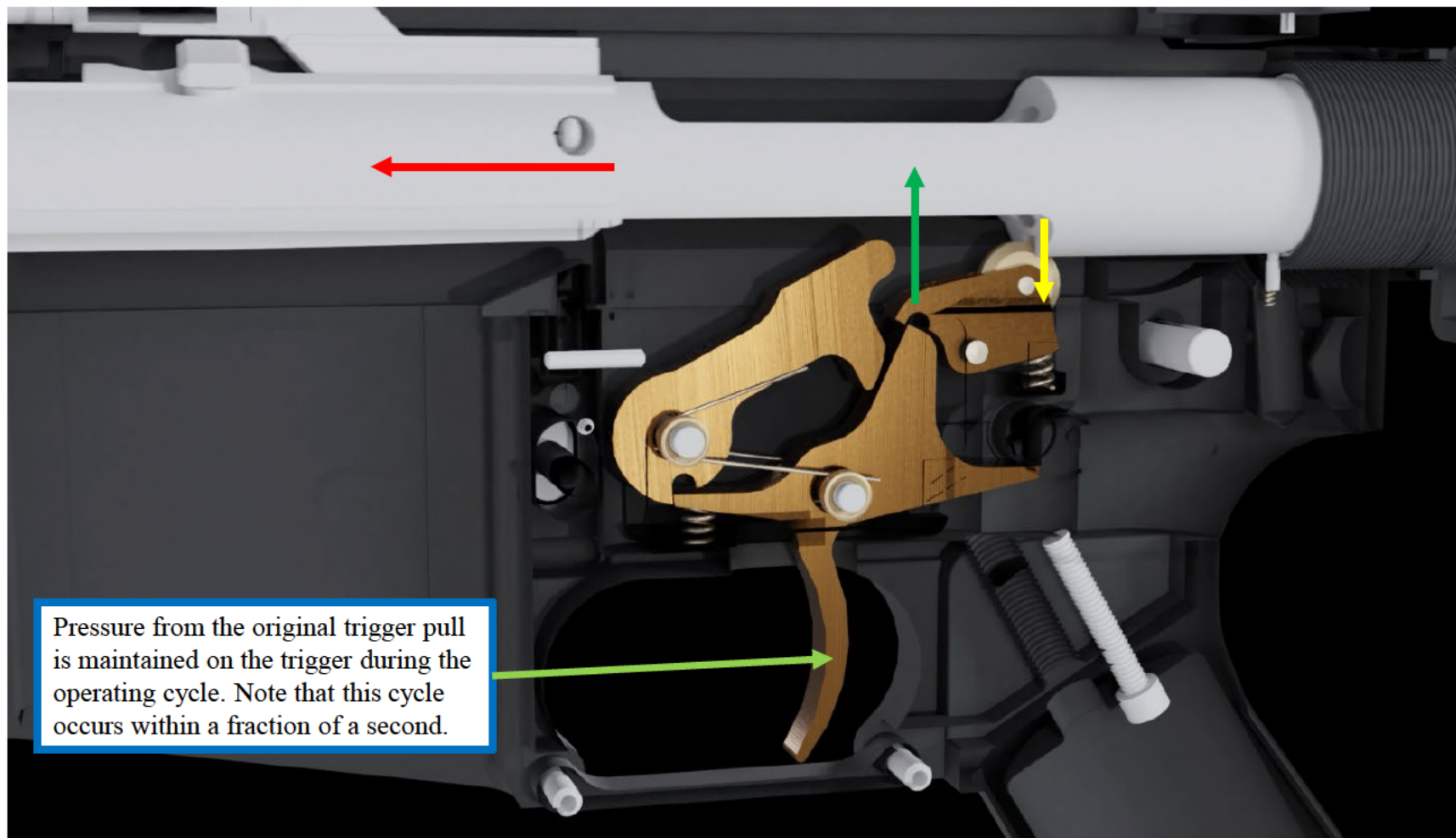
Pressure from the original trigger pull is maintained on the trigger during the operating cycle. Note that this cycle occurs within a fraction of a second.

In the Alamo-15 equipped firearm, as the bolt carrier group continues rearward to recoil also compressing the action spring, hammer contact with the bolt carrier group pushes down on the trigger which forces it forward allowing the "Safety Disconnecter with roller" to momentarily keep the trigger in place so that the shooter may not override the automatic functioning of the weapon. Note that it is possible to retain the pressure from the single function (pull) of the trigger during this self-acting or self-regulating phase of the mechanism's operation as the firearm goes into battery on a subsequent cartridge later in the operating cycle.

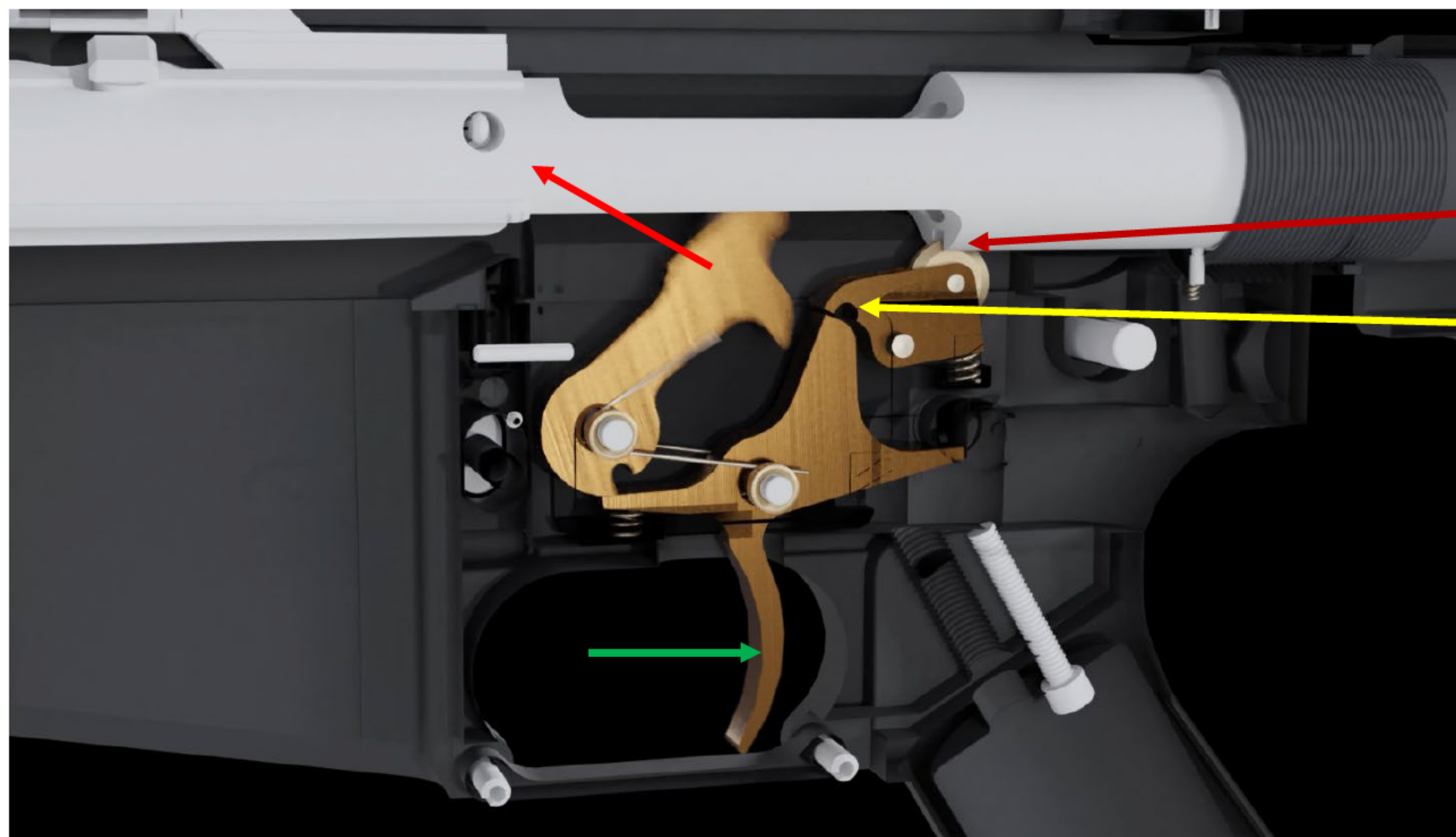


Pressure from the original trigger pull is maintained on the trigger during the operating cycle. Note that this cycle occurs within a fraction of a second.

Bolt carrier assembly moves forward chambering a cartridge as the trip surface of the required M16-type machinegun bolt carrier moves forward to automatically “trip” the “Safety Disconnect with roller” as the bolt assembly goes into battery during the operating cycle of the firearm.



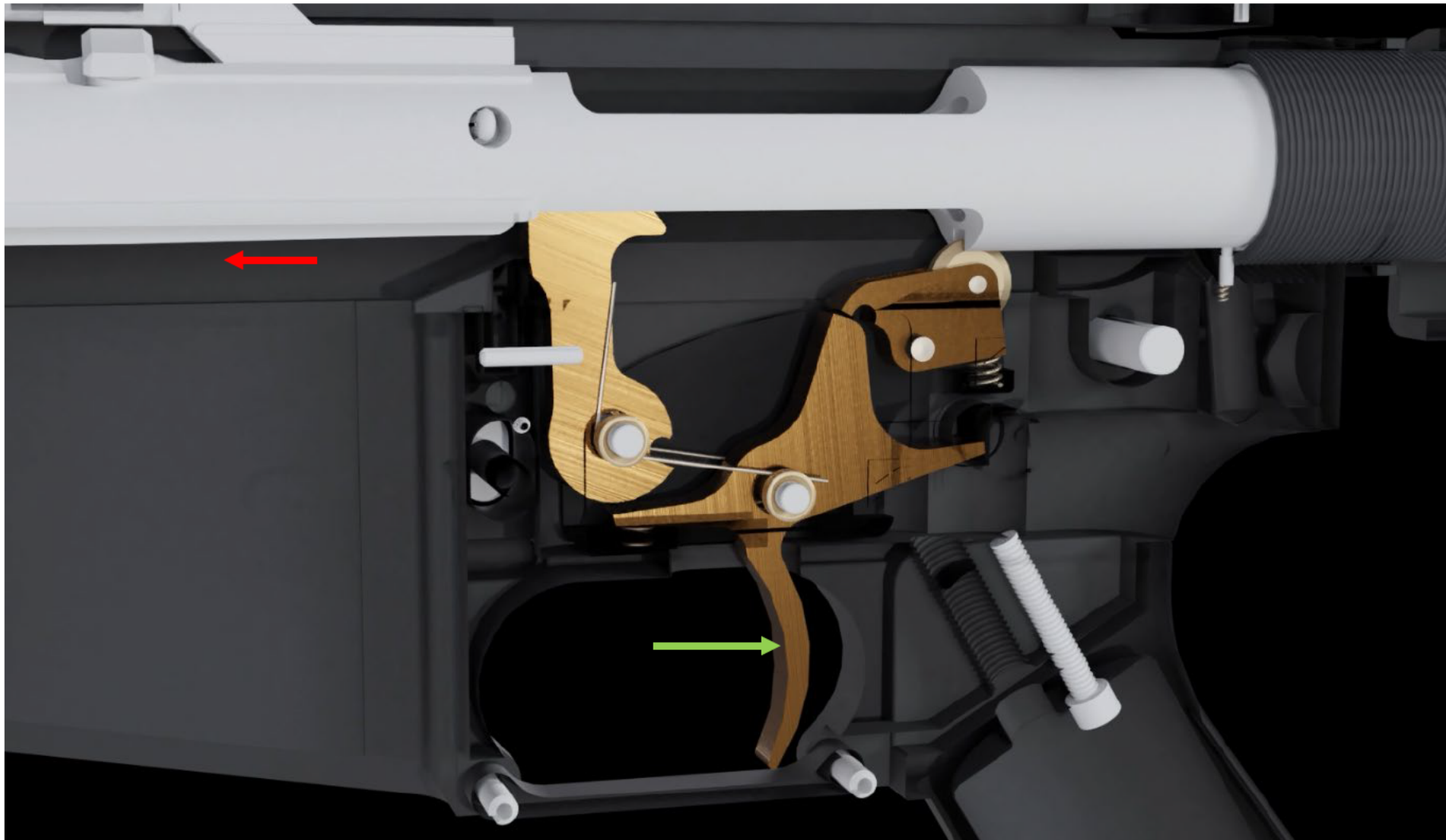
With pressure still maintained from the original continuous function (pull) of the trigger, the trigger, which was momentarily kept in the forward position into which it was automatically forced, is now free to fire subsequent shots with maintained pressure from the original function (pull) of the trigger, due to the self-acting or self-regulating mechanism. The “Safety Disconnect with roller” performs a timed delay function which is automatically disengaged during the operating cycle of the firearm, rather than a positive disconnect, as does the standard AR-15 type disconnect which requires that the trigger be physically released before a second shot can be fired.



M16-type machinegun bolt carrier contact “trip” surface” has contacted roller on the “Safety Disconnect” which disengages from trigger.

If pressure applied during the initial function (pull) of the trigger is maintained after firing the first shot during the operating cycle of the Alamo-15 equipped firearm, the self-acting or self-regulating mechanism will automatically press the trigger forward into the shooters finger thus “resetting” the trigger (with the original function (pull) of the trigger being maintained, subsequent shots are fired each time the momentary timed delay provided by the “Safety Disconnect with roller” is removed as it is impacted or “tripped” by a surface present on the required M16-type machinegun bolt carrier designed to preform that function on M16-type machineguns during the firearms operating cycle.

ATF 1101



Alamo-15 equipped weapon fires a second shot and continues to fire so long as constant pressure is maintained on the trigger as the weapon cycles.

Exhibit 1119 right side view.



Exhibit 1119 front view.



ATF 1103



Exhibit 1119 left side view.

767070-21-0065

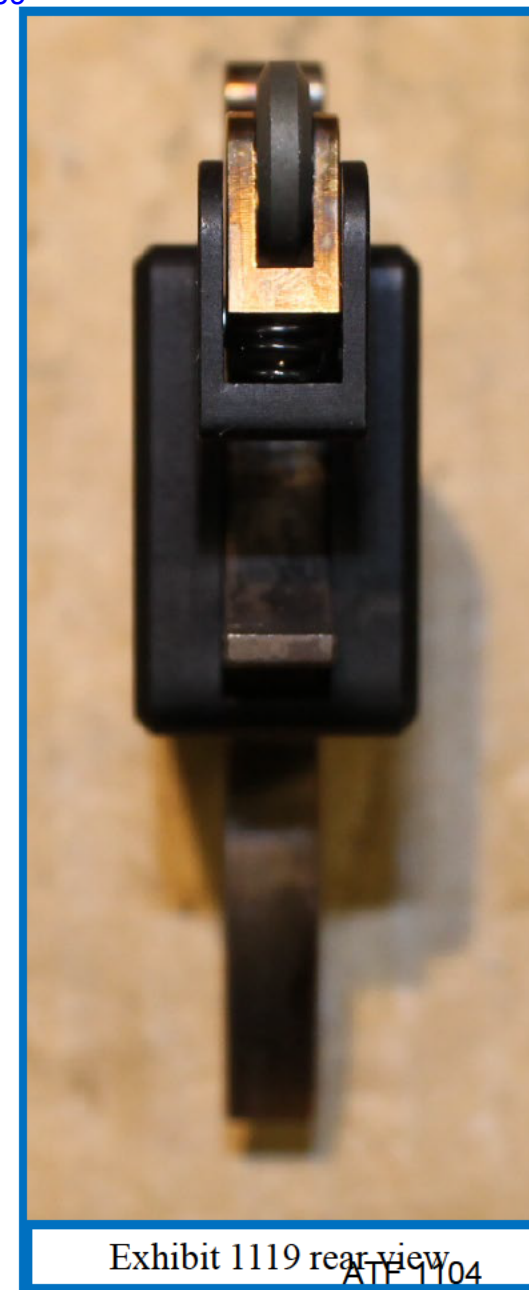


Exhibit 1119 rear view
ATF 1104



Exhibit 1119 top view with hammer cocked.

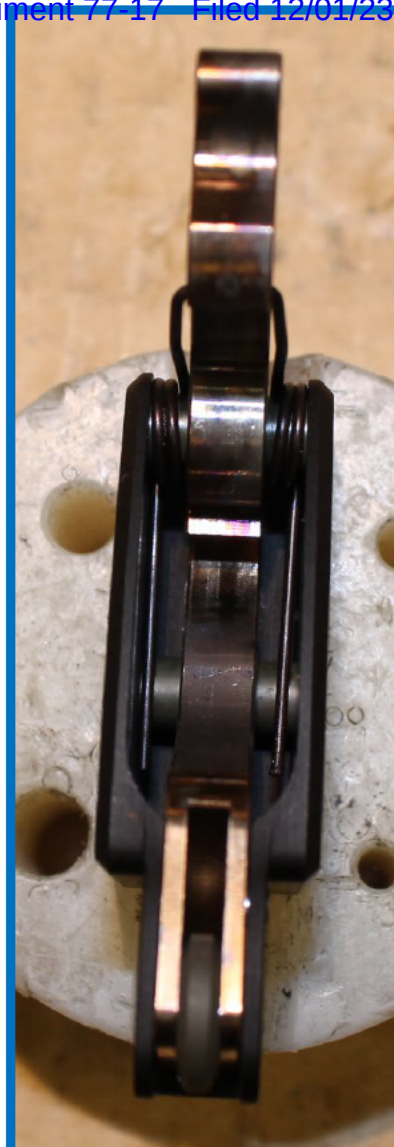


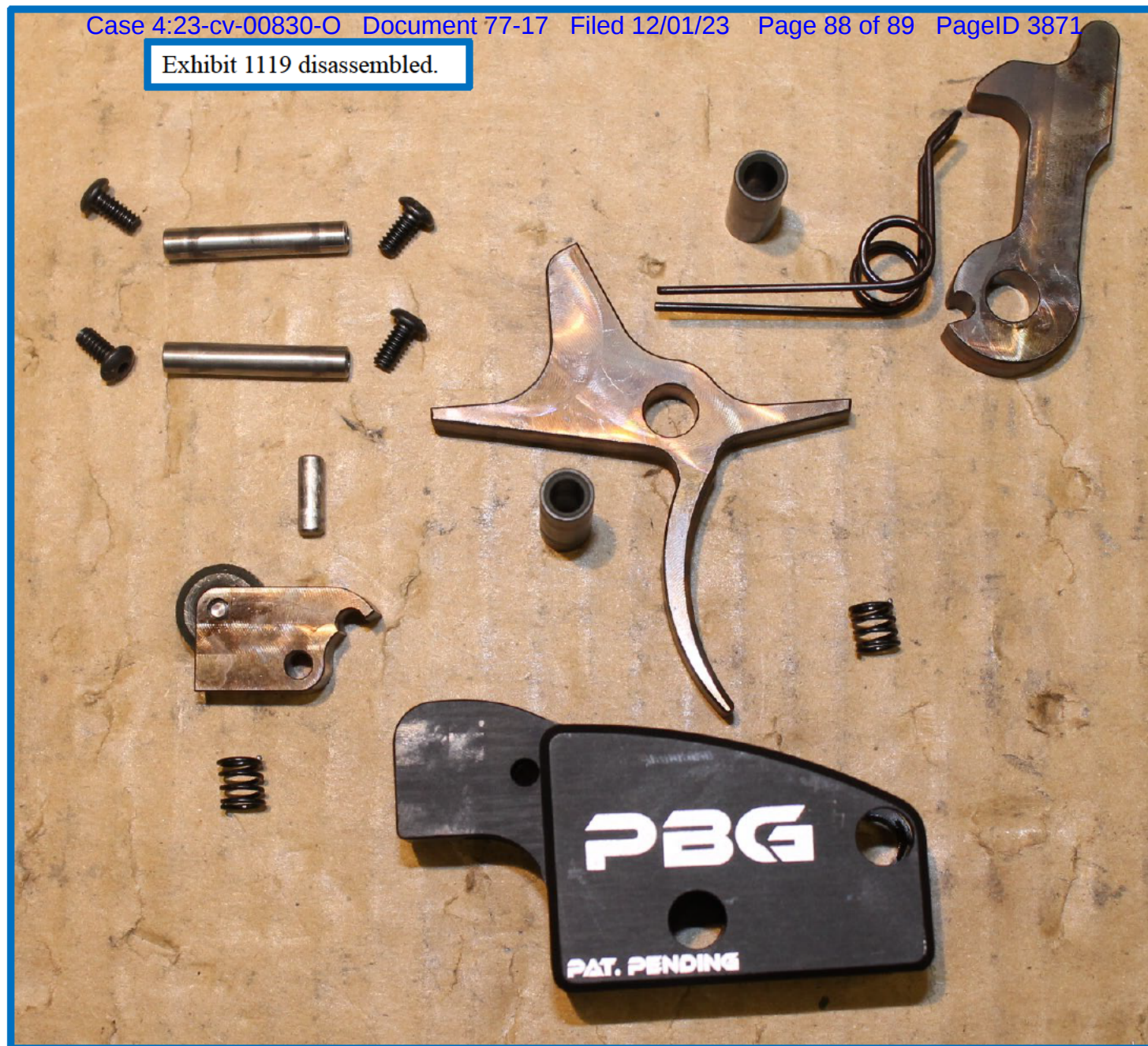
Exhibit 1119 top view with hammer forward.



Exhibit 1119 bottom view.
ATF 1105

Case 4:23-cv-00830-O Document 77-17 Filed 12/01/23 Page 88 of 89 PageID 3871

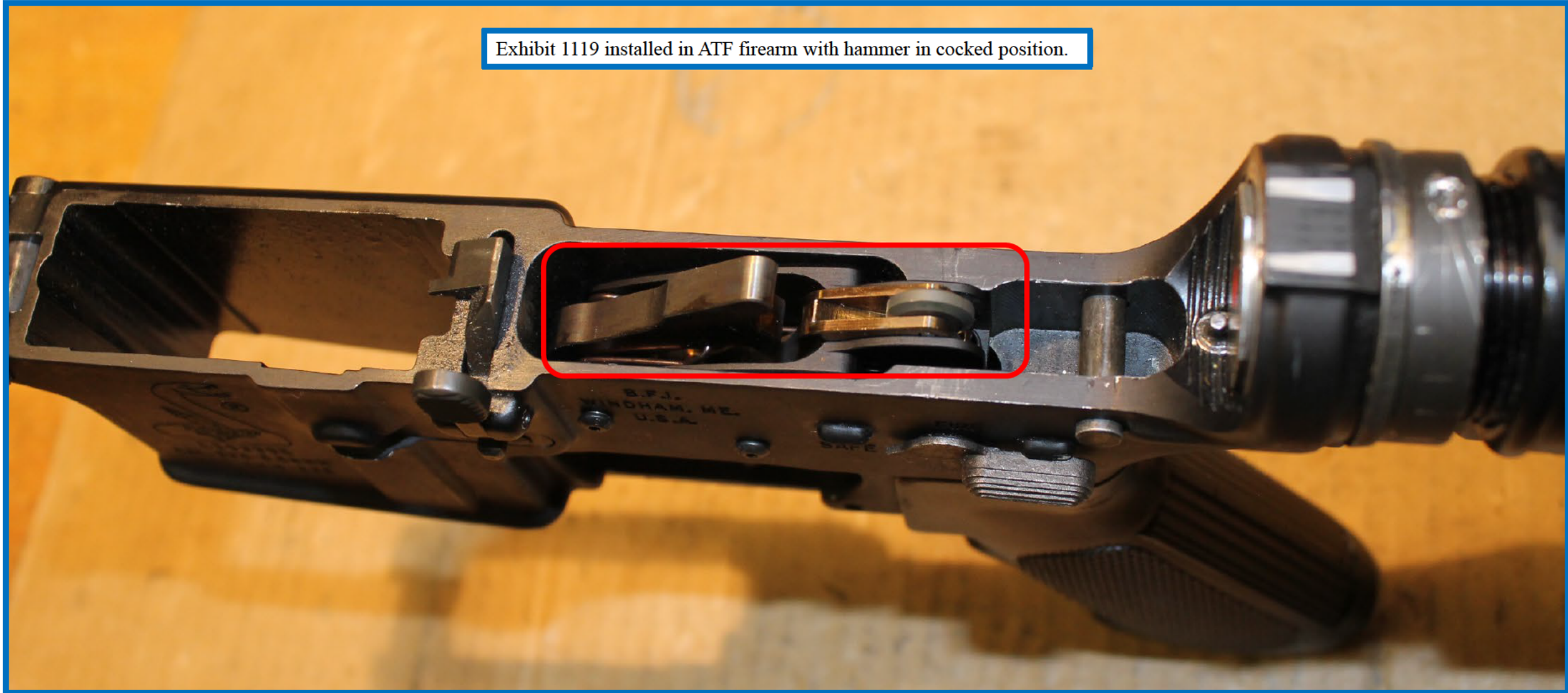
Exhibit 1119 disassembled.



767070-21-0065

ATF 1106

Exhibit 1119 installed in ATF firearm with hammer in cocked position.



ATF 1107

767070-21-0065